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\usepackage[T1]{fontenc}
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\usepackage{textcomp}
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\usepackage{gensymb}
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\usepackage{amsmath}
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\usepackage{hyperref}
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\usepackage{booktabs}
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\usepackage{caption}
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\setcounter{tocdepth}{0}
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\begin{titlepage}
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\centering
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\includegraphics{JES_FRPG.png}
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```
\huge J.E. Sawyer's \textit{Fallout} Role-Playing Game
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\end{titlepage}
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\onecolumn
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\textit{Fallout} was originally a computer role-playing game created by Interplay Entertainment Corp. in the late 1990s. Although the game was a success and spawned a sequel and two spin-offs, the company never developed a robust tabletop version of the game system or setting.

A fan version of \textit{Fallout} pen and paper rules has already been created; this set of rules is simply another version. It is not meant to be official or definitive. There may be elements of these documents

that contradict or re-write elements of history or functionality that were covered in the computer games. This is intentional. Different people have different tastes, and some things work better in a tabletop game than on a computer.

\textit{Caveat lector:} This system is not finished, not professional, and the author makes no claims that it is great or even good.

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\part{Introduction}

\chapter{What is \textit{Fallout}??}

\chapter{What is \textit{Fallout} Earth?}

\textit{Fallout} Earth is the setting in which \textit{Fallout} games take place. In the \textit{Fallout} Earth setting, twenty-first century America descended into an era of paranoia and mania similar to the 1950s. The U.S. government became more and more militant and aggressive against real and imagined enemies. Other world powers were often just as bad. As the world's fossil fuel supplies started to dry up and conversions to nuclear power lagged, people became desperate. Somehow, at the height of hysteria, someone launched nuclear weapons. Those who did not die in the following exchanges lived in darkness or misery for decades. Living in subterranean vaults or frozen in cryogenic chambers, humanity persevered. The Core Region was one of the first areas of the world in which significant interaction emerged, eighty years after the war. Though many regions of the formerly-civilized world are waking up, humanity has a long way to go if it is to ever stabilize.

\chapter{What is the Core Region?}

The Core Region is a portion of \textit{Fallout} Earth that corresponds to the twentieth century's American west coast and southwest in general. It was the focus of the \textit{Fallout} computer games and, as such, has much more detail to it than other regions of \textit{Fallout} Earth. It is the setting with which fans of the computer games are most familiar.

\part{Simple}

\chapter{Simple Overview}

Simple is the game system used to run \textit{Fallout} tabletop games. The system used in the \textit{Fallout} computer games was SPECIAL. SPECIAL was a variant of Steve Jackson Games' GURPS.

\subsubsection*{Whoa, whoa, whoa! What's up with all of these acronyms?}

GURPS = Generic Universal Role Playing System. GURPS was designed to be an extremely flexible, extensible game system. Using GURPS, players can run fantasy games, sci-fi games, or even cowboy-western style games. SPECIAL = Strength, Perception, Endurance, Charisma, Intelligence, Agility, Luck. SPECIAL was designed to work for \textit{Fallout}'s computer medium. Though it used a lot of different formulae to derive attributes and calculate the results of combat checks, it was not problematic because human beings were not required to do the calculations.

\subsubsection*{Okay, so what's up with Simple?}

Simple is designed to be easy to get into, but have long term flexibility for players. It is not intended to be as flexible as GURPS or as detailed as D&D 3.5. Though the mechanics for high technology and high skills can become more complex, the basics are, well, simple.

These rules assume that people want to play \textit{Fallout} tabletop games because they enjoy the setting and are more interested in the idea of what their characters can do in the game world than what they can do on a piece of paper. You will not find rules on aging penalties, rolling for weather, or how to create bigger and badder versions of equipment. It uses levels and hit points for ease, but does not use things like alignment or class.

The Simple rule system requires the use of three types of dice: six-sided (d6), eight-sided (d8) and ten-sided (d10). These dice are mostly used to calculate weapon damage. Skill checks make frequent use of two ten-sided dice, which are sometimes referred to as "percentile" with one die representing the tens digit and the other die representing the singles digit (d100).

Characters are statistically defined through Primary Attributes, Derived Attributes, Floating Attributes, Skills, Perks, and Traits.

\twocolumn

\chapter{Character Creation}

Creating a character for \textit{Fallout} using the Simple system is fairly similar to many other pen and paper systems. It involves allocating primary statistics, establishing secondary statistics, then calculating derived statistics and allocating points. The final stage, equipment selection, is always performed in close cooperation with the Overseer.

Please note that this section does not cover the very important Background and Personality Creation that should occur in any campaign oriented around role-playing.

\section{Allocating Primary Attributes}

As you will find in the Primary Attributes section, all characters have six statistics that define their basic mental and physical capabilities. All characters start with -3 in every statistic. The player may allocate a total 24 points across all six statistics. No statistic may be raised above 5.

It is important to note that later in character creation, race selection, traits, or perks may modify these primary attributes above or below the ranges listed here (-3 to 5).

\section{Establishing Secondary Attributes}

Simple's Secondary Attributes are either determined by the Overseer or decided by the player at character creation. For example, some Overseers may decide to start a high-level campaign where all characters start at 10th level. This has a large effect on allocating points later on. Attributes like race may be limited by the Overseer, but otherwise may be selected by the player.

\section{Calculating Derived Statistics}

All of the Derived Attributes in Simple can be calculated using the primary attributes and secondary attributes. Although allocating points will change these values later on, it is best to calculate derived statistics before the point allocation phase.

`\section{Allocating Points}`

``Points'' include all of the following elements, and should be done in the following order for ease:

`\begin{itemize}`

- `\item` Select zero, one, or two Traits.
- `\item` Pick three Tag! skills (unless a trait gives the character less or more).
- `\item` Spend all available skill points on skill rates.
- `\item` Pick as many perks as you qualify to take.

`\end{itemize}`

`\section{Equipment Selection}`

`\textit{Fallout}` and Simple do not use a traditional method of equipment selection. Characters are not allocated money to spend on items with fixed values. Instead, the Background and Personality Creation of the character, combined with the flavor of the character and the power level of the campaign, should determine starting equipment.

`\begin{itemize}`

- `\item` Tribal Background: Little to no money; leather outfits; basic, non-powered melee and missile weapons; tribal chem variants only; flora, fauna, and simple ``found'' tech; no vehicles; pack animals and attack animals.
- `\item` Backwater Background: Little money; no armor; basic, non-powered melee weapons; basic, single-shot, low-power firearms; no chems; ``found'' tech; non-powered vehicles; pack animals.
- `\item` Vault Background: No money; no armor; basic, non-powered melee weapons; basic, single-shot, low-power firearms; basic stimpaks; no tech; Pip Boys; no vehicles.
- `\item` Civilized Background: Some money; no armor; basic, non-powered melee weapons; no firearms; basic stimpaks and some standard chems; variety of tech; non-powered vehicles and low-powered single-rider vehicles; pack animals.

\item Other background types are certainly possible, but these four basic backgrounds should give insight into what strengths and weaknesses each type might have. They are not intended to be ``realistic'', just sensible.

\end{itemize}

\chapter{Primary Attributes}

These skills represent the raw capabilities of a character. They do not reflect much learning or development.

\section{Strength}

Physical power. Affects carrying capability and damage with many melee and thrown weapons. Affects throwing range.

\section{Perception}

Senses and intuition. Affects chance to detect hard-to-notice people/places/things. Affects accuracy with ranged weapons.

\section{Endurance}

Hardiness and resilience. Affects health, healing rate, and similar things.

\section{Charisma}

Force of personality. Affects speech skills and other character interactions.

\section{Intelligence}

Reasoning ability. Affects academic skills.

\section{Agility}

Balance, speed, and grace. Affects combat speed and efficiency as well as several skills.

\chapter{Secondary Attributes}

In addition to primary attributes, characters also possess attributes that are either ``fluff" statistics or statistics used to derive other statistics (see Derived Attributes, below).

`\section{Level}`

A character's level represents an arbitrary rating of experience and overall ``toughness". Characters increase levels by gaining experience. ``Advancing a level" is a mini-game where players spend skill points and perk slots after they achieve the next highest requisite experience point total. A character's level affects the following things:

`\begin{itemize}`

- `\item` Total hit points

- `\item` Total skill points

- `\item` Total perks

- `\item` Access to perks

`\end{itemize}`

`\section{Experience Points}`

Experience points more finely represent what level does: ``adventuring" experience and overall toughness. Characters earn experience points by doing tasks (solving quests, killing monsters, using skills, figuring things out). When characters get enough experience, they can advance a level. Experience points only affect one thing: character level.

`\section{Race}`

Race is not ethnicity (skin color, for our purposes). Race specifies if the character is a human, super mutant, ghoul, animal, plant, or robot. Race affects a variety of statistics. Most notably, it affects the following:

`\begin{itemize}`

- `\item` Primary attributes: super mutants have bonuses to strength, ghouls have bonuses to intelligence, but both have penalties to charisma (for example).

- `\item` Secondary Attributes: super mutants and ghouls can have much higher age values, and their body frame choices are limited. Available traits are also limited by a creature's race.

\item Derived Attributes: many races have inherent thresholds and resistances. For instance, super mutants have several inherent damage thresholds, ghouls have high radiation resistance, and all living creatures have the highest possible EMP thresholds (robots do not).

\end{itemize}

\section{Age}

Age is simply a value associated with a character. It has no inherent value, but players should assign attributes appropriately for the age of their character.

\section{Sex}

This is the character's biological sex. It has no direct effect on any other statistics.

\section{Ethnicity}

This basically defines the skin color of the character for humans (Caucasian, Asian, African, Hispanic, etc.) and possibly some ghouls. It has no direct effect on any game stats.

\chapter{Derived Attributes}

\section{Combat Sequence}

\begin{displaymath}

$$\mathrm{ST} + \mathrm{AG}$$

\end{displaymath}

At the beginning of combat, it is added to the result of a $1d10$ roll. It determines when the character takes his or her turn in combat. Higher is better, resulting in the character acting earlier.

\section{Healing Rate}

\begin{displaymath}

$$\mathrm{EN} + 6$$

\end{displaymath}

People heal at different rates over time. Your healing rate will tell you how fast you heal. If you have taken damage, you will get a number of hit points back at the end of each day equal to your $\text{healing rate} \times \text{level}$. If you rest, you will get a number of hit points back every six hours equal to your $\text{healing rate} \times \text{level}$. Therefore, in a day where the character

spends 75\% of the time awake and active and 25\% of the time resting, he or she will regain $\$2 \times \text{healing rate} \times \text{level}$ in hit points. In no case can healing rate allow you to get more current hit points than your maximum number of hit points. Healing rate is also used for recovery from fatigue. A character loses fatigue at his or her healing rate every round/ 6 seconds.

`\section{Skill Rate}`

`\begin{displaymath}`

`\mathrm{IN} + 6`

`\end{displaymath}`

How many skill points you gain per level (including first level). Spend skill points on the following skill rank scale:

`\begin{itemize}`

`\item 1--10: 2`

`\item 11--20: 3`

`\item 21--30: 4`

`\end{itemize}`

If a skill is Tagged, each rank costs one less skill point per rank. Players are allowed to save skill points if they cannot spend all of them.

`\section{Perk Rate}`

How many levels must pass before you gain another perk. By default, it is 1 , though some characters may take traits that change this.

`\section{Evade}`

`\begin{displaymath}`

`\mathrm{AC}`

`\end{displaymath}`

The amount added to an enemy's difficulty to hit after all other modifiers are applied. This can be further modified by perks.

`\section{Carry Weight}`

`\begin{displaymath}`

`(\mathrm{ST} + 6) \times 25`

`\end{displaymath}`

The higher your carry weight, the more equipment you can carry. You can carry a total amount of equipment in pounds equal to your carry weight, and no more.

`\section{Melee Damage Bonus}`

`\begin{displaymath}`

`\mathrm{ST}`

`\end{displaymath}`

The amount of damage added to a melee weapon's damage result. Characters with low strength can do zero damage if their Melee Damage Bonus brings their damage total to zero or less.

`\begin{itemize}`

`\item One-handed melee weapons get a $+1$ Damage bonus for every point of strength`

`\item Unarmed Melee and Two-Handed melee weapons get a $+2$ Damage bonus for every point of strength`

`\end{itemize}`

`\section{Throwing Range}`

`\begin{displaymath}`

`\mathrm{ST} + 6`

`\end{displaymath}`

This is the distance in hexes that any thrown weapon can be hurled by the player. It defines the maximum range of a weapon, as opposed to a firearm's attack modes defining it. Only relevant when the character is making a throw attack.

Certain thrown weapons have range bonuses or penalties, such as the bow, flamer, and grenade launcher.

\section{Hit Points}

First Level:

\begin{displaymath}

$$30 + \mathrm{EN} + \mathrm{ST}$$

\end{displaymath}

Each Subsequent Level:

\begin{displaymath}

$$6 + \mathrm{EN}$$

\end{displaymath}

Hit points represent a character's ability to withstand physical punishment before dying. When a character reaches zero hit points, he or she dies.

\section{Primary Skill Bonuses}

In addition the points that characters spend in skills, they gain a natural bonus based off of their primary attributes. Though many things (like skills, drugs, etc.) can add to skill bonuses, primary skill bonuses are always derived from the character's primary attributes. It is important to note that these bonuses do not actually increase the skill rank for purposes of qualifying for perks or spending extra skill points to increase ranks. See skills for the bonuses on each skill.

\chapter{Traits}

\section{Bruiser}

A little slower, but a little bigger. You may not hit as often, but they will feel it when you do! Your combat sequence is $\$-4\$,$ but your damage with melee and unarmed attacks are increased by $\$2\$.$

\section{Chem Reliant}

You are more easily addicted to chemicals. Your chance to be addicted to chemicals is twice normal, but you recover faster from their ill effects.

\section{Clean Living}

You try to avoid the quick thrills of chemical enhancements. Chemicals only affect you half as long as normal, but your chance to be addicted is half normal.

\section{Fast Shot}

You don't have time to take aim because you're too busy firing off shots as fast as possible. During the charge phase, you can fire a firearm instead of charging (eliminates you from the action phase of that round), but your critical hits with firearms always come in 6 point increments.

\section{Finesse}

Your attacks show a lot of finesse. You don't do as much damage, but you cause more critical hits. -2 to damage, $+2$ to attack rolls for purposes of determining critical hit results.

\section{Gifted}

You are naturally superior to those around you, but you often rely on your natural talents instead of putting effort into mastering a variety of skills. You gain $+7$ points to spend on primary attributes, but you earn perks only once every four levels.

\section{Good Natured}

You're a friendly person and are hesitant to employ violence to solve problems. You have $+2$ to Medic, Persuasion, and Science. However, your combat sequence is -4 .

\section{Increased Metabolism}

Your metabolic rate is increased. This means that you are much less resistant to radiation and poison, but your body heals faster. -10% to radiation and poison resistance, $+2$ to healing rate.

\section{Kamikaze}

By not paying attention to any threats, you can rush in where angels fear to tread. You are easier to hit, but you act earlier in combat. -2 to Evade, $+4$ to Combat Sequence.

\section{Night Person}

When performing actions at night (6 p.m. to 6 a.m.), you do things better. During the day, however, it has nothing to do with the level of light, just the time of day. You're not a morning person. $+2$ to all skill checks at night, -2 to all skill checks in daytime.

\section{One Hander}

You excel with one hand, but two-handed weapons cause a problem. $+2$ chance to hit with one-handed weapons, -2 to hit with two-handed weapons.

`\section{One In a Million}`

You're not particularly lucky or unfortunate, but when lightning strikes, it strikes hard! Whenever you critically hit or fail, a second check is made at five times the base chance to see if it actually happens. If it does, the result on the critical chart is bumped up $+30$ points in severity.

`\section{Skilled}`

Since you spent more time improving your skills than a normal person, you gain an additional Tag skill. However, you gain -1 skill points every level because you often spread yourself too thin.

`\section{Small Frame}`

You are smaller than average. It's hard for you to carry heavy loads, but it's easy to avoid the lumbering giants of the wasteland. -50 to Carry Weight, $+2$ to Evade.

`\chapter{Skills}`

The following list of skills is a general skill that covers most tasks in the `\textit{Fallout}` setting. Each skill lists its skill bonus in parentheses and has several entries for sample task difficulties. Use these task difficulties as a guide for completing similar tasks in the world.

To make a skill check, roll $2d10$ and to it, add your skill ranks, skill bonus, and any other appropriate modifiers. If the sum is equal to or greater than the task difficulty, you successfully make the check.

`\subsubsection{Task Difficulties}`

`\begin{itemize}`

`\item Trivial: 5`

`\item Very Easy: 10`

`\item Easy: 15`

`\item Average: 20`

`\item Hard: 25`

\item Very Hard: 30

\item Epic: 35

\end{itemize}

\section{Academics (IN)}

Most knowledge not covered by other skills is covered by Academics. Academics represents trivia and general lore about history, philosophy, and the like.

\section{Athletics (ST)}

No, this skill isn't intended to cover sporting events. Instead, Athletics covers general activities of an athletic nature. Climbing, jumping, and swimming are all covered by Athletics.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Trivial---Climb a sturdy ladder without losing your grip. Jump down from a height of 4'--6' onto level ground without falling prone. Tread calm water while unencumbered.

\item Very Easy---Climb a rickety ladder without losing your grip. Jump down from a height of 4'--6' onto uneven ground in dim lighting without falling prone. Tread calm water while lightly encumbered.

\item Easy---Climb a slippery ladder without losing your grip. Jump across a 1 hex chasm from a standstill or a 2 hex chasm with 1 hex of running. Swim a short distance in calm water while lightly encumbered.

\item Average---Climb using improvised but sturdy, well-placed handholds without losing your grip. Jump across a 1.25 hex chasm from a standstill or a 2.5 hex chasm with 5 hexes of running. Swim a short distance in choppy water while lightly encumbered.

\item Hard---Climb using improvised, awkward handholds without losing your grip. Jump across a 1.5 hex chasm from a standstill or a 3 hex chasm with 5 hexes of running. Swim a long distance in choppy water while lightly encumbered.

\item Very Hard---Climb using improvised, awkward, widely-spaced handholds without losing your grip. Jump across a 1.75 hex chasm from a standstill or a 3.5 hex chasm with 5 hexes of running. Swim a long distance in choppy water while heavily encumbered.

\item Epic---Climb using improvised, slippery, awkward, widely-spaced handholds without losing your grip. Jump across a 2 hex chasm from a standstill or 4 hex chasm with 5 hexes of running. Swim a long distance in stormy water while heavily encumbered.

\end{itemize}

\section{Deception (CH)}

This combination of speech, facial expressions, and body postures is used to trick people.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Trivial---Convince an average little kid or a slightly retarded person of something a little implausible.

\item Very Easy---In casual conversation, successfully tell a minor lie to an adult of average intelligence.

\item Easy---In casual conversation, successfully tell a risky/dangerous lie to an adult of average intelligence.

\item Average---Under suspicion, successfully tell a minor lie to an adult of average intelligence or in casual conversation, successfully tell a minor lie to an adult of high intelligence.

\item Hard---Under suspicion, successfully tell a risky/dangerous lie to an adult of average intelligence or in casual conversation, successfully tell a risky/dangerous lie to an adult of high intelligence.

\item Very Hard---Under great suspicion, successfully tell a minor lie to an adult of average intelligence.

\item Epic---Under great suspicion, successfully tell a risky/dangerous lie to an adult of high intelligence.

\end{itemize}

\section{Firearms (AG)}

The firing of all mechanically launched projectiles (including bows and crossbows) is covered by this skill. By far, the most common skill check for firearms is attempting to hit a target. For that reason, the difficulty listed here is simply the base required to hit a default target at close range.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Very Easy---Hitting a clearly illuminated stationary large target at point blank range.

\end{itemize}

\section{Investigation (PE)}

Not to be confused with the Perception attribute (which is used for passive detection), the Investigation skill is used to actively perceive things in the environment and in other characters.

\section{Mechanics (PE)}

Mechanics covers knowledge for all sorts of mechanical and electronic devices (other than computers). It's used to deal with everything from engines to elevator doors to weapons and armor.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Trivial---Make really easy repairs to machines of low complexity (rusty door hinge, stuck doorknob). Operate simple machines.

\item Very Easy---Make easy repairs to machines of low complexity (fix simple hand pump, clean out clogged drain pipes). Build the most rudimentary melee weapons.

\item Easy---Make standard repairs to machines of low complexity (fix the gears on a bike, change the brake rotors on a car). Build some ordinary melee weapons. Operate machines of average complexity.

\item Average---Make standard repairs to machines of average complexity (replace a gasket on a standard engine, fix a smashed grandfather clock). Build all "ordinary" melee weapons and first tier armor types (Metal Outfit, Scav Outfit, Leather Outfit). Repair most conventional firearms. Operate complex machines.

\item Hard---Make standard repairs to machines of high complexity (overhaul a coal generator to run on diesel fuel, calibrate a large, complicated water filtration system). Build a few advanced melee weapons (Ripper, Super Sledge, etc.) and tier two armor types (Metal armor, Env. Armor, Leather Armor) Repair all conventional firearms and a few advanced ones.

\item Very Hard---Make difficult repairs to machines of high complexity (rebuild a robot destroyed by a minigun, mount a jet engine to a car and wire in a remote control to the steering, acceleration, and brakes, perform maintenance on a functioning tokamak reactor). Build any weapon short of the most

advanced, and build tier three armor (Power Armor, Tesla Armor, Combat Armor, UAF Armor). Repair any weapon.

\item Epic---Make insane repairs to machines of high complexity (piece together bits of robots into a new mega-robot, build your own verti-bird, build your own nuclear reactor). Build any weapon, any armor, repair any broken equipment.

\end{itemize}

\section{Medic (PE)}

The medic skill covers everything from the knowledge of creature anatomy to hands-on proficiency at treating wounds, healing broken limbs, and dealing with toxins/disease.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Trivial---Can sometimes heal scrapes. Knows which end of the stimpak to put into a person.

\item Very Easy---Can heal trivial wounds, can rarely fix broken limbs.

\item Easy---Can heal minor wounds, perform trivial surgeries. Can occasionally fix maims.

\item Average---Can heal serious wounds, perform minor surgeries, lessen the effects of minor toxins and diseases. Can fix maims most times. Can remove low gray count. Can make sloppy chems.

\item Hard---Can heal severe wounds, perform average surgeries, lessen the effects of many toxins and diseases. Can almost always fix maims, sometimes fix breaks. Can remove medium gray count. Can make standard chems and healing kits.

\item Very Hard---Can heal critical wounds, perform complicated surgeries, lessen the effects of deadly toxins and diseases. Can easily fix maims, usually fix breaks. Can remove high gray count. Can make advanced chems, doctor kits, and stimpaks.

\item Epic---Can heal outright deadly wounds, perform astounding surgeries, eliminate the effects of any toxin or disease. Can easily fix maims and almost always fix breaks. Can remove very high gray count. Can make super chems, advanced medical tools, and stimpaks.

\end{itemize}

\subsubsection{Specific Tasks}

\begin{itemize}

\item Field Healing: A PC can tend to one character with field healing at a cost of 30 AP and two charges of a kit. The check is Very Easy Difficulty and heals 8 points of damage. For every 5 points over the check, the character heals an additional \$+4\$ points. A character can only receive field healing once in a day.

\item Long-Term Healing: A PC can tend to up to five characters (including himself or herself) to heal more damage over time. The character must make a Trivial Difficulty Medic check. Making it heals an additional \$+8\$ damage over the character's normal healing rate and uses one charge from their kit. For every 5 points over the check, the character heals an additional \$+4\$ points.

\item Lowering Grays: Characters suffering from Acute Radiation Sickness (ARS) will have a Gray count that usually spells their quick death. Timely use of the Medic skill and a kit can help alleviate these problems. A character's Gray count falls at their healing rate per day, but this usually isn't quick enough to prevent their death. An Easy Difficulty Medic check will heal an additional \$+4\$ damage over the character's normal healing rate and uses one charge from their kit. For every 5 points over the check, the character heals an additional \$+4\$ points.

\item Repair Maim: Repairing a maim requires an Average Medic check and requires a full day of rest from the receiving character. For 5 points over the check, the amount of rest required drops by 2 hours.

\item Repair Break: Repairing a break requires a Very Hard Medic check and requires 10 full days of rest from the receiving character. For every 5 points over the check, the amount of rest required drops by 1 day.

\end{itemize}

\section{Melee (ST)}

The use of all hand-to-hand and thrown weapons is covered by the Melee skill.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Very Easy---Hitting a clearly illuminated stationary large target at point blank range.

\end{itemize}

\section{Outdoorsman (PE)}

This skill covers scouting and survival in the wilderness.

\subsubsection{Task Difficulties}

\begin{itemize}

\item Trivial---Finding north when you know the time of day and can see the sun in a clear sky. Associating heavy clouds and thunder with rain and lightning. Knowing not to eat rotten or maggot-infested flesh.

\item Very Easy---Finding north when the sun is partially obscured and the time of day is uncertain. Associating a change in humidity with the possibility of impending rain. Able to prepare ordinary game to make it palatable for consumption.

\item Easy---Finding north in a clear sky at night. Associating creature movements with weather patterns and the locations of food and water. Able to prepare poisonous game to make it palatable for consumption.

\item Average---Tracking a small group of people or animals over clear ground during daylight. Finding enough water to keep a single human adult healthy for a day. Able to forage safe plants for human consumption. Turn a large animal into a leather outfit or six shivs.

\item Hard---Tracking a small group of people or animals over broken ground during night. Finding enough water to keep three or four human adults healthy for a day. Able to forage safe plants for three or four adults to consume. Able to spot dangerous natural locations for what they are one hundred feet ahead of time. Turn a small animal into a leather outfit or six shivs. Make equivalent of Medic chems.

\item Very Hard---Tracking a single person or animal over clear ground during daylight. Finding enough water in the desert to keep a single human adult healthy for a day. Able to forage safe plants in the desert for a single adult human to consume. Able to spot dangerous natural locations for what they are one hundred yards ahead of time. Turn a large animal into leather armor, ten shivs and two bows. Make equivalent of Medic chems.

\item Epic---Tracking a single person or animal over clear ground during night. Finding enough water in the desert to keep three or four human adults healthy for a day. Able to forage safe plants in the desert for three or four adults to consume. Able to spot dangerous natural locations for what they are a mile ahead of time. Turn a small animal into leather armor, ten shivs and two bows. Make equivalent of Medic chems.

\end{itemize}

\section{Persuasion (CH)}

Persuasion is used to convince people of what you want them to believe, either through diplomacy or threats.

\subsubsection{Task Difficulties}

`\begin{itemize}`

`\item Trivial`---Companions do what they want to do and don't listen to a goddamned thing you say. Convince a weak-willed person to do something he or she doesn't mind doing.

`\item Very Easy`---Companions do what you ask, but only when everything is perfect. Convince an average Joe or Josephine to do something he or she doesn't mind doing.

`\item Easy`---Companions do what you ask, but only when odds are in your favor. Convince a weak-willed person to do something he or she ``kinda'' doesn't want to do.

`\item Average`---Companions do what you ask, but only when odds are fair. Convince an average Joe or Josephine to do something he or she ``kinda'' doesn't want to do.

`\item Hard`---Companions do what you ask, even when the firefights get heavy. Convince an average Joe to do something very dangerous or otherwise seriously repulsive.

`\item Very Hard`---Companions will fight alongside you even when the going gets very, very tough. Convince hardened skeptics to do something very dangerous or otherwise seriously repulsive.

`\item Epic`---Convince shaky companions to follow your lead into certain torture and death. Break the resolve of a fanatically stubborn individual.

`\end{itemize}`

`\section{Pilot (AG)}`

Not commonly used in the wasteland, Pilot is required for the operation of vehicles of all sorts.

`\section{Security (AG)}`

This catch-all skill encompasses lockpicking and dealing with traps. While Investigation is used for locating traps of all sorts, Security must be used to disarm or otherwise neutralize a trap once it has been found.

`\section{Science (IN)}`

The broad Science skill covers knowledge of mathematics, physics, computers, and a bit of biology and chemistry (overlapping with Medic).

`\subsubsection{Task Difficulties}`

`\begin{itemize}`

\item Trivial---Follow the most simple-minded directions on a computer designed for ignorant buffoons. Perform up to double-digit addition and subtraction without trouble.

\item Very Easy---Do very simple menu surfing on a computer. All addition, subtraction, multiplication and division are fine.

\item Easy---Use a decent computer interface to get information. Simple algebra and geometry. Build crude explosives. Very rudimentary chemistry and physics knowledge.

\item Average---Use a crummy computer interface to get information, some of it requiring permission changing and other ``average" operations. Build standard ammo, simple materials. Complex algebra and geometry. Solid chemistry and physics knowledge.

\item Hard---Get information from a low-security computer, hop through unintentional security holes to gain access to remote information (like Linux's horrible sendmail and telnet weaknesses). Build standard ammo variants (armor piercing, hollow point, etc.). Solid calculus and differential equations knowledge. Complex chemistry and physics knowledge.

\item Very Hard---Get information from well-protected computers. Exploit bizarre, hidden weaknesses to do impressive things with computers. Build rare/complicated ammunition, refined explosives, and complex polymers/alloys/assorted compounds. Advanced calculus and differential equations knowledge. Advanced chemistry and physics knowledge.

\item Epic---Crack the highest security computers made by man. Build the most sophisticated industrial components in existence. Solve math problems that are incomprehensible to all but geniuses. Stretch the limits of scientific knowledge.

\end{itemize}

\section{Sneak (AG)}

General skulking and creeping without detection is covered by Sneak.

\section{Steal (AG)}

The Steal skill is used to swipe things without being detected.

\section{Unarmed (ST)}

Punching, kicking, holding, and otherwise beating people down with your body (and objects like brass knuckles) is covered by the Unarmed skill.

\subsubsection{Task Difficulties}

`\begin{itemize}`

`\item Very Easy---`Hitting a clearly illuminated stationary large target at point blank range.

`\end{itemize}`

`\chapter{Perks}`

Perks are special bonuses that allow characters to do things above and beyond the normal capabilities provided by their base attributes and skills. A perk might allow you to do more damage with melee weapons, heal allies more efficiently, or even attract fanatical followers. Most characters start with one perk at first level and gain an additional perk every three levels. Characters may take any perks for which they meet the prerequisites. Primary attribute requirements assume base stats, not stats modified by chems or implants. Skill requirements assume ranks, not total scores.

`\section{Accelerated Healing}`

`\noindent\textbf{Prerequisites:}` EN 6, Level 3

`\noindent\textbf{Ranks:}` 3

`\noindent\textbf{Benefit:}` With each rank of this perk, you gain \$+4\$ to your healing rate for both rest and alleviating fatigue.

`\section{Action Boy}`

`\noindent\textbf{Prerequisites:}` AG 5, Level 12

`\noindent\textbf{Ranks:}` 1

`\noindent\textbf{Benefit:}` Action boy allows you to perform two skill-related actions during the action phase, but the results of the skill checks are always halved for both.

`\section{Advanced Research}`

\noindent\textbf{Prerequisites:} IN 7, Science 5

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You might not know much about the guns and armor mouth-breathing grunts use, but you sure as hell know how to manufacture energy weapons, railguns, and power armor. You have \$+5\$ to your skill when making qualifying equipment. Requires a Science Lab.

\section{Armorer}

\noindent\textbf{Prerequisites:} IN 4, Mechanics 5

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You are extremely skilled at making conventional body armor (all non-Power and non-Tesla armor). You have \$+5\$ to your skill when making qualifying equipment. Requires a Mechanics Shop.

\section{Artful Dodger}

\noindent\textbf{Prerequisites:} AG 6, Athletics 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You're quite used to using your natural agility to avoid attacks. You have a bonus of 2 to Evade.

\section{Ayyyyyy!}

\noindent\textbf{Prerequisites:} Security 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You can punch or kick a locked object and add $d10 \times 5$ to the Security check. However, if successful, this automatically opens the object and is always noisy.

\section{Battlefield Saint}

\noindent\textbf{Prerequisites:} Medic 10

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} Healing wounds under pressure comes naturally to you. Though you gain no bonus to healing broken limbs or curing other ailments, when successfully performing field healing, you heal $+4$ hit points for every rank of this perk.

\section{Biff!}

\noindent\textbf{Prerequisites:} Melee 10

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You make the best use of your firearms, even when they run out of ammo. When you score a hit with a Smash or Bean, your attack is increased by 20 for purposes of determining critical hits.

\section{Bigger They Are\dots}

\noindent\textbf{Prerequisites:} ST 6 and Melee 20

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Your attacks with melee weapons have a greater chance of knocking an opponent over. And when they are knocked over, they get knocked back farther. Double the knockback chance and distance for any melee attack (not unarmed).

\section{Body's Still Warm}

\noindent\textbf{Prerequisites:} Unarmed 4, Steal 20

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Your skill at theft is so calmly focused that you can exercise your talent even in battle. Though it is difficult (\$+10\$ Difficulty), you may select an enemy in combat for theft and steal one of their unequipped items.

\section{Bone Head}

\noindent\textbf{Prerequisites:} EN 7, Level 6

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You've been banged around enough that you've developed a very thick skull. Critical hits against your head have to exceed 25\% of your total hit points to achieve a maim, and over 75\% to achieve a break. BONUS: When combined with Unbreakable, this changes to 50\% for a head maim, with no chance of a head break.

\section{Bonus HtH Attacks}

\noindent\textbf{Prerequisites:} AG 6, Unarmed 10, Melee 10

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You have learned the mystic arts of the East, or you just punch faster. In any case, your melee and unarmed attacks cost 2 less AP to perform.

\section{Bonus HtH Damage}

\noindent\textbf{Prerequisites:} ST 6, AG 6 and Unarmed 10 or Melee 10

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} Experience in hand-to-hand combat has given you the edge when it comes to damage. You do an additional \$+2\$ damage with melee and unarmed attacks with each level of this perk.

\section{Bonus Move}

\noindent\textbf{Prerequisites:} AG 5, Level 6

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} For each level of Bonus Move, you can Walk move or Run move an additional hex in the movement phase.

\section{Bonus Ranged Damage}

\noindent\textbf{Prerequisites:} AG 6 and (Firearms 5 or Melee 15)

\noindent\textbf{Ranks:} 2

\noindent\textbf{Benefit:} Experience with ranged weapons has given you the edge when it comes to damage. You do an additional \$+2\$ damage with thrown melee weapons and firearms with each level of this perk.

\section{Bonus Rate of Fire}

\noindent\textbf{Prerequisites:} PE 6, IN 6, AG 7, and (Firearms 10 or Melee 20)

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You've got quick hands, quick eyes, and a quick mind between them. Your extraordinary skill with ranged weapons results in all attacks with ranged melee weapons and firearms gaining an additional attack at a \$-4\$ penalty.

\section{Born Leader}

\noindent\textbf{Prerequisites:} Persuasion 15 and CH 8

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} You've finally come into your own as a leader, and positively radiate confidence to everyone around you. All allies standing within three hexes per rank gain \$+1\$ to all skill checks.

\section{Bracing}

\noindent\textbf{Prerequisites:} Melee 15 or Firearms 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You know how to handle weapons as big as you with ease. You can move with a heavy weapon in hand and participate in the action phase in the same round.

\section{Bulk Trader}

\noindent\textbf{Prerequisites:} Persuasion 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Quantity is the name of the game, and you're holding all the cards. When you buy and sell goods, you get a \$+25\%\$ when you sell five at once.

\section{Child of the Wastes}

\noindent\textbf{Prerequisites:} Outdoorsman 10, Melee 5, Security 5

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You are skilled at stalking and killing in the wasteland. You gain \$+1\$ to damage against all animals and plants. You also have \$+5\$ to relevant skills when making equipment at an Outdoorsman Camp.

\section{Comprehension}

\noindent\textbf{Prerequisites:} IN 6 and (Science 15 or Mechanics 15)

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You pay much closer attention to details when you are reading. You gain 50\% more skill points when reading skill-increasing books.

\section{Cotton Fingers}

\noindent\textbf{Prerequisites:} AG 6, Sneak 20

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Every interaction you take, from attacking enemies to opening doors, is half the volume it would normally be. This makes it much easier for you to get away with your sneaky infiltration of populated areas.

\section{Crackerjack Timing}

\noindent\textbf{Prerequisites:} IN 5, Security 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Punctuality is a vital element of life for you, and it's also a vital element of death! When you set the timer on a trap, it always goes off at the time you specified.

\section{Critical Defense}

\noindent\textbf{Prerequisites:} PE 5, AG 5, Firearms 5, Melee 5, Unarmed 5

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} You've been battered around enough in combat to know when you really need to get out of the way. As a result, when an enemy scores a hit on you, their attack roll is effectively lowered by 10 points for purposes of determining critical hits.

\section{Cult of Personality}

\noindent\textbf{Prerequisites:} CH 7, Persuasion 10

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} Each time this perk is taken, the PC gains a subordinate NPC. This subordinate NPC has its own personality, but ultimately, he/she/it is under the control of the PC. Only under extreme duress does the GM take control of the subordinate NPC. Consult the GM before taking this perk, as it requires integration into the game's storyline.

\section{Demolition Man}

\noindent\textbf{Prerequisites:} IN 7, Security 5

\noindent\textbf{Ranks:}

\noindent\textbf{Benefit:} You'll teach those caravan houses a lesson about stealing brahmin, oh yes, you will. You have the ability to make complex traps, bombs, and general explosives for a variety of nefarious purposes. You have \$+5\$ to your skill when making qualifying equipment. Requires a Science Lab.

\section{Doctor On Call}

\noindent\textbf{Prerequisites:} PE 6, Medic 20

\noindent\textbf{Ranks:} 2

Benefit: As long as everyone is sitting still and following your directions, you can get them back to tip-top shape in no time. When using wound healing on characters, all characters you successfully treat heal an additional \$+4\$ hit points regardless of other bonuses.

Educated

Prerequisites: IN 6 and Academics 10

Ranks: 3

Benefit: Each rank of Educated adds 2 skill points every time you advance a level. It is best purchased early in your adventuring career.

El Bandolero

Prerequisites: IN 3 and Firearms 15

Ranks: 1

Benefit: You've been carrying guns and ammo all over the wasteland for quite a while now, and you're not a drooling idiot, so you know a thing or two about how to store it. All ammo weight for you is reduced by \$50\%\$.

Electronic Eye

Prerequisites: Mechanics 15 and Investigation 5

Ranks: 1

Benefit: You can always know the exact hit points, damage thresholds, and statuses of any robot you examine.

Esteemed Academic

\noindent\textbf{Prerequisites:} IN 9, Academics 30

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} From now on, they'll have to call you Professor Science Boy! You have the ability to write skill-increasing books and, subsequently, lift the ignorant masses from their confused drooling and post-apocalyptic rock-banging. Requires a Science Lab.

\section{Explorer}

\noindent\textbf{Prerequisites:} Outdoorsman 20

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} The mark of the Explorer is to search out new and interesting locations. With this perk, you have a better chance of finding special encounters (mechanics TBD).

\section{Firewalker}

\noindent\textbf{Prerequisites:} EN 8

\noindent\textbf{Ranks:} 2

\noindent\textbf{Benefit:} You have mastered the arts of walking on coals and taking cookie pans out of the oven bare-handed. For each level of this perk, you have \$+4\$ Heat DT that stacks with armor.

\section{Fists of Fury}

\noindent\textbf{Prerequisites:} Unarmed 15

\noindent\textbf{Ranks:} 3

Benefit: You may make an additional melee or unarmed attack during the charge or action phase at a $\$-4\$$ penalty.

Flexible

Prerequisites: AG 5, Athletics 10

Ranks: 1

Benefit: You can change from prone to stand and still participate in other phases of combat. Also, you can change from prone to crouch or crouch to stand as a free action at the beginning or end of your movement phase.

Flower Child

Prerequisites: EN 5

Ranks: 1

Benefit: With this perk, you are 50% less likely to be addicted to chems and you suffer half the withdrawal time of a normal person.

Gain

Prerequisites: Level 12

Ranks: 1

Benefit: This perk actually reflects seven sub-perks. Your primary attribute of choice is increased by 1. You may take this perk once for each primary attribute.

Gunsmith

Prerequisites: Mechanics 5

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You have a talent for creating conventional firearms and ammunition. You have \$+5\$ to your skill when making qualifying equipment.

\section{Heave, Ho!}

\noindent\textbf{Prerequisites:} Melee 5

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} Your throwing range is increased by 2 for each level of this perk.

\section{Here and Now}

\noindent\textbf{Prerequisites:} Level 3

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You immediately gain 1 level upon taking this perk.

\section{Hit the Deck!}

\noindent\textbf{Prerequisites:} AG 6, Athletics 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You react very quickly to the word ``incoming''. When hit by damage from explosions or sprays, you are considered to be an additional 2 hexes away from the origin for purposes of determining damage.

\section{I'll Sleep When I'm Dead}

\noindent\textbf{Prerequisites:} EN 6, Medic 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You don't let shock bring you down, because it's all in your head. In fact, short of large holes in your chest, not much can bring you down. You cannot die as a result of fatigue.

\section{In Your Face!}

\noindent\textbf{Prerequisites:} Melee 15 or Unarmed 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Opponents suffer a 4 penalty with any firearm attack mode, Bean, Lob, or Throw when you are within 1 hex and holding melee weapons or are unarmed.

\section{Innocent Bystander}

\noindent\textbf{Prerequisites:} Deception 15, Steal 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Your thievery is so smoothly executed that you can easily steal two items from someone for every single successful Steal check.

\section{Junk Merchant}

\noindent\textbf{Prerequisites:} Persuasion 10

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} All items you find that are worth 1-5 bottlecaps are worth five times as much when you trade them.

\section{Lifegiver}

\noindent\textbf{Prerequisites:} EN 4, Level 2

\noindent\textbf{Ranks:} 2

\noindent\textbf{Benefit:} With each rank of this perk, you gain an additional 4 hit points each time you advance a level.

\section{Light Step}

\noindent\textbf{Prerequisites:} AG 5, Security 5, Sneak 5

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} Maybe it was the landmine that almost blew your leg off, or maybe it was the sight of your buddy in pieces next to you. Whatever the cause, when you meet the triggering criteria for a landmine, door bomb, or steel trap, there is a 4 in 20 chance per rank that it fails to go off anyway.

\section{Living Anatomy}

\noindent\textbf{Prerequisites:} Medic 15 and (Melee 10 or Firearms 10 or Unarmed 10)

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You have a better understanding of the strengths and weaknesses of living creatures. You gain a \$+2\$ damage bonus against all living creatures and when you score a hit against living creatures, your attack roll is increased by 5 for purposes of determining critical hits.

\section{Mental Catalogue}

\noindent\textbf{Prerequisites:} PE 4, Academics 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You can get the identified name and description of any item you examine, even if you don't meet the other skill requirements.

\section{Monkeywrench}

\noindent\textbf{Prerequisites:} Mechanics 15

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You know the weaknesses of robots so well that you gain \$+4\$ to damage against them and successful attacks against them are increased by 20 for purposes of determining critical hits.

\section{More Criticals}

\noindent\textbf{Prerequisites:} Firearms 20 or Melee 20 or Unarmed 20

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} When you score a hit in combat, add 20 to the attack roll for purposes of determining critical hits.

\section{Nice Grouping}

\noindent\textbf{Prerequisites:} Firearms 20

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} For every rank of this skill, the secondary and tertiary burst penalties are pushed out one round. E.g.: On a six round burst, the first round would have no penalty, the second would have a 4 penalty, and the third, fourth, fifth, and sixth would have an 8 penalty. With two ranks of Nice Grouping, the first, second, and third rounds have no penalty, the fourth round has a 4 penalty, and the fifth and sixth rounds have an 8 penalty.

\section{Night Vision}

\noindent\textbf{Prerequisites:} PE 6

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} With the Night Vision Perk, you can see in the dark better. This will halve any and all penalties for darkness.

\section{Pathfinder}

\noindent\textbf{Prerequisites:} Outdoorsman 10, EN 6

\noindent\textbf{Ranks:} 2

\noindent\textbf{Benefit:} You are better able to find the shortest route. Your overland (long-term) travel time is reduced by 25%. N.B.: Does not apply to allies.

\section{Pharmacist}

\noindent\textbf{Prerequisites:} Medic 5

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You have a talent for creating chems and medical supplies. You gain a \$+5\$ bonus when making qualifying equipment. Requires a Science Lab.

\section{Quick Equip}

\noindent\textbf{Prerequisites:} Firearms 5 or Melee 5

\noindent\textbf{Ranks:} 1

Benefit: This perk allows the user to equip items faster than normal. You can

Itemize:

Put away and take out one small item and still participate in the charge or action phases.

Put away or take out two small items and still participate in the charge or action phases.

Put away or take out one large item and still participate in the charge or action phases.

Put away and take out one large item, but NOT participate in the charge or action phases.

End Itemize:

Rad Child

Prerequisites: EN 7 or Ghoul

Ranks: 1

Benefit: You do not take immediate damage from radiation. In fact, you gain extra healing while being exposed to it! However, radiation continues to build up in your system as normal. For every 10 ranks of radiation in your system, your healing rate is increased by 1.

Sharpshooter

Prerequisites: Firearms 25 or (Firearms 15 and PE 7)

Ranks: 1

Benefit: You have a talent for hitting things at longer distances. When using Firearms, your attack ranges are all increased by a factor of 1. E.g., if Point Blank for your weapon is 4 hexes, it becomes 8 hexes, Close moves from 8 to 12, and so on.

Silent Death

Prerequisites: Sneak 15 and (Unarmed 15 or Melee 15)

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} While sneaking, if you hit a critter in the back with a hand-to-hand attack, you will cause double damage.

\section{Silent Running}

\noindent\textbf{Prerequisites:} Sneak 10 and AG 6

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} With this perk, you now have the ability to sneak while running without penalty. Without this perk, sneak chances are halved when running.

\section{Simple Machines}

\noindent\textbf{Prerequisites:} Science 20 and IN 7

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You are so well versed in the artificial intelligence routines of robots that they suffer a 4 penalty to hit you.

\section{Six-Shooter}

\noindent\textbf{Prerequisites:} Firearms 15 and PE 8

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You know that your trusty revolvers won't jam like those new-fangled automatic pistols. And hey, if you can't drop someone in six shots (or five), you need to spend more time at the firing range. When using revolvers, you never suffer critical failures, gain \$+4\$ to range, and attacks are considered to be \$+10\$ for purposes of determining critical hits.

\section{Slayer}

\noindent\textbf{Prerequisites:} Unarmed 25 and ST 7 and AG 7

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} The slayer walks the wasteland! When using unarmed attacks, your successful attack rolls are increased by 30 for purposes of determining critical hit results.

\section{Snakeeater}

\noindent\textbf{Prerequisites:} EN 3

\noindent\textbf{Ranks:} 2

\noindent\textbf{Benefit:} Yum! Tastes like chicken. For each level of this perk, you gain \$+5\$ Bio DT that stacks with armor.

\section{Sniper}

\noindent\textbf{Prerequisites:} Firearms 25 and PE 7 and AG 7

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You don't waste bullets on flesh wounds. When using firearms, your successful attack rolls are increased by 30 for purposes of determining critical hit results.

\section{Specialize}

\noindent\textbf{Prerequisites:} Level 3

\noindent\textbf{Ranks:} 1

Benefit: When selecting this perk, the player is allowed to select one skill for a permanent \$+4\$ bonus. The points are bought using the normal skill scale. Leftover points are saved, but allocated only toward that skill.

Stat!

Prerequisites: Medic 15 and AG 6

Ranks: 3

Benefit: When using the

Steady Aim

Prerequisites: Firearms 15 and PE 6

Ranks: 3

Benefit: You have the patience to wait for the perfect shot. You may sacrifice your move action to aim, gaining a \$+2\$ bonus to hit per rank.

Stonewall

Prerequisites: ST 6 and Level 3

Ranks: 1

Benefit: You've been around long enough to know how to keep your footing in a fight. There is a 50% chance you can ignore any knockdown or kneel effect.

Street Sweeper

Prerequisites: Firearms 20 and ST 6

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} You know when to hold `em, know when to fold `em\ldots in half with bullets! When making sweep attacks, you gain a \$+2\$ bonus to hit (after penalties).

\section{Strong Back}

\noindent\textbf{Prerequisites:} ST 5 and EN 5 and Level 3

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} Each level of this perk allows you to carry an additional 50 lbs. of equipment.

\section{Suicide King}

\noindent\textbf{Prerequisites:} Cult of Personality and Persuasion 10 and CH 8

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} When standing within your area of influence, CNPC allies always ignore how wounded they are when you attempt to control them in combat.

\section{Swift Learner}

\noindent\textbf{Prerequisites:} \$< \text{Level 6}\$ and IN 6 and (Mechanics 10 or Medic 10 or Outdoorsman 10 or Science 10) or Swift Learner

\noindent\textbf{Ranks:} 3

\noindent\textbf{Benefit:} You are indeed a swift learner with this perk, as each level gives you an additional +5% bonus when you earn experience points. This perk is not retroactive, so buy it early.

\section{Tag!}

\noindent\textbf{Prerequisites:} Any three skills above 20

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Your mastery over several skills has opened up another skill for your attention. Select an additional skill to tag. You will gain a permanent 5 points in that skill bought on the standard scale. Also, after buying this perk, the cost for advancing the Tag! skill is one less than normal. I.e.: 1--10: 1 11--20: 2 21--30: 3

\section{Team Player}

\noindent\textbf{Prerequisites:} Persuasion 10 and CH 6

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} There is no "I" in "ENCLAVE", and you know that better than anyone. You gain \$+2\$ to all skill checks when within the influence of at least two teammates.

\section{Tech Vulture}

\noindent\textbf{Prerequisites:} Mechanics 10 and PE 5

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Waste not, want not. When you find a recently destroyed robot, there is a good chance you will be able to salvage something useful from it. You may replenish tool kit charge from robots. Regain \$1d6\$ charges from a small robot, \$1d8\$ from a medium, and \$1d10\$ from a large.

\section{Tough Hide}

\noindent\textbf{Prerequisites:} EN 8

\noindent\textbf{Ranks:} 1

Benefit: Maybe you stood next to the reactor too much. Maybe a harsh life of slavery inured you to the little scuffs and scrapes of this God-forsaken world. Or maybe you're just a certified bad ass. You gain +2 Normal DT and +2 Ballistic DT that stack with armor.

Triage

Prerequisites: Medic 10 and Investigation 5

Ranks: 1

Benefit: You know the exact hit points, fatigue, damage thresholds and primary statistics of any living creature you examine.

Two-Fisted Death

Prerequisites: AG 7, Firearms 15 or Melee 15

Ranks: 1

Benefit: Faced with two enemies, you've got two guns: one for each of 'em. This perk allows you to use two weapons at the same time with halved penalties.

Unbreakable

Prerequisites: EN 8

Ranks: 1

Benefit: You see dead people, swing away, and no one calls you Mr. Glass. How's that for a pop-culture reference, jackass? Critical hits against your head, arms, legs, torso, and groin have to do 50% of your total hit points to achieve a break.

Weapon Master

Prerequisites: Melee 25 and ST 7 and PE 7

\noindent\textbf{Ranks:} 1

\noindent\textbf{Benefit:} Some say a man is only as good as his tools. You are not one of those people. Your successful melee attack rolls are increased by 6 for purposes of determining critical hit results.

\chapter{Karma and Reputations}

\chapter{Vital Status}

\chapter{Actions}

Combat in a world filled with firearms, radscorpions, and hostile plants can be a tricky thing. Simple tries to break the process down into easily digestible chunks for your gaming pleasure. Simple combat is sequentially turn-based, with characters performing independent actions in order of combat sequence. Combat begins when characters take aggressive action against one another or when the Overseer believes it is imminent. Combat ends when hostilities have ended for a reasonable period of time, determined by the Overseer.

Even though Simple is a relatively uncomplicated system, you will still need the following items to carry out accurate combat calculations:

\begin{itemize}

\item Hex Mat---Combat in \textit{Fallout} is based on the use of a hex grid. If your local game store does not carry hex mats, try the online web store at Chessex (\url{http://www.chessex.com/}).

\item Mat-Friendly Markers---You may need these to draw out walls, obstacles, etc., and also to mark the locations of characters if a session ends mid-combat.

\item Miniatures---You don't have to buy actual metal miniatures, but having some sort of scale appropriate (\$6' per 2m across a hex from face to face) representation of characters is a good idea. Miniatures should always indicate facing.

\item String---A 12" long piece of ordinary string should suffice. It will be used to chart line of sight.

\item 30° and 60° Wedges---These can be made of paper, plastic, or slices of watermelon, if you really want. They should be a few inches long and will be used to help determine where an attack mode's narrow and wide cones fall.

\end{itemize}

\section{Combat Procedure}

\subsection{The Three Phses of Combat}

Combat in \textit{Fallout} is divided into three distinct phases: move, charge, and action. All characters involved in a battle will resolve their movement before any are allowed to charge (if able) and all characters will resolve their charge before they are allowed to take their action. This style of combat may seem strange, but it provides the capability for interesting tactical choices and events.

\subsection{Determining and Following Sequences}

At the beginning of every combat, all characters must determine their combat sequence, which is followed for the entirety of combat. Roll a single d_{10} and to it, add your combat sequence. If two or more characters are tied, have them each roll a d_{10} to determine order, with the highest always winning out. Once the order is established, the number itself isn't important. Characters will always act in order of sequence in each phase.

Newcomers to battles are always added on to the end. If multiple newcomers join in the same round, they fight for pecking rights at the end by rolling for sequence as though they started a new battle.

\subsubsection{Move Phase}

During the move phase, characters can perform one (1) of the following actions:

\begin{itemize}

- \item Prone move or climb up to one hex.
- \item Crouch move or swim up to two hexes.
- \item Stand move to four hexes.
- \item Run move up to eight hexes (character cannot participate in the charge or action phases for the round).
- \item Put away or take out one small item.
- \item Put away and take out one small item (character cannot participate in the charge or action phases for the round).
- \item Put away or take out two small items (character cannot participate in the charge or action phases for the round).

\item Put away or take out one large item (character cannot participate in the charge or action phases for the round).

\item Switch from prone to crouch or crouch to stand.

\item Switch from prone to stand (character cannot participate in the charge or action phases for the round).

\item Evade, inflicting a -5 penalty on all attacks against you (character cannot participate in the charge or action phases for the round).

\end{itemize}

The character can also, on their turn during this phase, perform as many of these free actions as they want:

\begin{itemize}

\item At the very beginning or end of their movement turn, switch from stand to crouch, crouch to prone, or stand to prone.

\item Drop items of any size.

\end{itemize}

N.B.: Characters in heavy armor (Power Armor, Tesla Armor, etc.) cannot Run move and cannot switch from prone to stand. Characters with a heavy weapon (Rocket Launcher, 7.62mm Machinegun, etc.) in hands cannot participate in the action phase if they perform anything but free actions in the movement phase.

\subsubsection{Charge Phase}

During the charge phase, characters can perform the following action, once.

\begin{itemize}

\item From a standing position, charge no less than one hex and no more than four hexes overlapping a straight line to immediately perform a melee attack on an adjacent target.

\end{itemize}

\subsubsection{Action Phase}

During the action phase, characters can perform one (1) of the following actions:

`\begin{itemize}`

`\item` Use a skill (includes making attacks).

`\item` Use an item (includes loading/repairing).

`\item` Declare a narrow cone overwatch zone, which allows the character to interrupt an enemy with a single attack during the next movement phase if the enemy enters the overwatch zone (character cannot participate in the move or charge phases for the next round).

`\end{itemize}`

`\subsection{Ending a Round and Beginning the Next Round}`

The round ends when everyone involved in combat capable of taking actions has done so, and all combat sequences are accounted for and re-sorted. The next round starts with the lowest sequence character acting first in the movement phase, then going through the queue. In the charge and action phases, the highest sequence character acts first. Unconscious characters are skipped.

`\section{Actions in Combat}`

When a character's combat sequence comes up, it is likely that the player will want them to do something. The following mechanics cover those actions.

`\subsection{Choosing an Attack Mode}`

When a character makes an attack against another target, they must use an attack mode from their weapon against the specified target (character or hex). Though some critters may have special attack modes that fall outside of what is listed here, this list should encompass most weapons and attacks. There are two important terms that may come up in a few of the attack modes: narrow cone and wide cone. A narrow cone is defined as a 30° cone, the angle between a hex vertex and the middle of an adjacent hex face from the center of a hex that contains both. A wide cone is defined as a 60° cone, the angle between a hex vertex and an adjacent hex vertex from the center of a hex that contains both. Players need not use cones strictly on the hex vertices and faces, but a cone originating from their hex will always have its source at the center of their hex. A hex and its occupant(s) are considered to be "inside" a cone if more than half of the hex is within the cone. Cones angles that fill the exact same fraction of hexes on the left and right should be specified as left-biased or right-biased hexes. A left-biased cone will affect hexes on the left and a right-biased cone will affect hexes on the right.

\subsubsection{Beans, Lobs, and Throws}

Beans, lobs, and throws all use the melee skill, but may be performed with a variety of items (even non-weapons). Throws travel in a straight line and are intended to cause damage with the force of the attack. Lobs can be thrown at hex targets even if the attacker does not have a line of sight, though he or she must be able to reasonably reach said target with a vertical arc. A lob is not intended to cause direct harm, but to get the item into a specified hex. Lobs are often used to toss grenades into the center of a crowd or to toss equipment to allies. Lobs have half the range that the item normally uses (use improvised weapon rules for non-weapons) and suffer a 4 penalty to hit. A bean is the equivalent of a smash: throwing an improvised weapon at an enemy in the hopes that it will cause some small amount of damage. They operate like throws, but suffer a 4 penalty to hit.

\subsubsection{Burst}

Burst attacks allow the attacker to fire off a number of rounds from a firearm in a very short period of time, always at one target. Weapons that are burst-capable will list the number of rounds the burst fires. All bursts suffer a 5/10 penalty to hit for rounds after the first. The first penalty is applied to the second round in the burst. The second is applied to all subsequent rounds. Only one attack roll is made for all rounds in the burst. E.g.: Frank has a 9mm submachinegun with a 6 round burst and a 5/10 burst penalty. He needs a 15 to hit his target. His total, after rolling, is 21, which is enough to hit. The second round has a 5 penalty, pushing him to 16, which still hits. The third, fourth, fifth, and sixth rounds are at 11, so they all miss.

\subsubsection{Disarm}

A disarm is essentially an unarmed attack and can occur during either the charge or action phases. Disarming a small item requires only one open hand. Disarming a large item requires two. To disarm, the attacker must make an Unarmed skill check against a Very Easy difficulty plus the target's Unarmed skill total. If successful, the item is in the hand(s) of the attacker.

\subsubsection{Double Shot}

This is identical to single shot, but two barrels are firing simultaneously. It is used rarely, mostly for weapons like double-barreled shotguns.

\subsubsection{Overload}

Characters using weapons that take SECs or MFCs as their primary ammo can perform an action called "overloading". The overload action itself is a standard action, but the process takes one or more full rounds. For each round of overloading, the weapon will effectively fire another charge of ammunition during a single shot. Performing one round of overloading costs twice as much ammunition as a single shot would normally require. Once the overload maximum has been reached, it costs one shot worth of

ammunition per round to hold the overload (regardless of the number of overloads that have been performed). A character can release the overload harmlessly as an action.

`\subsubsection{Punches and Kicks}`

Without weapons, most creatures can still make punches and kicks. These are strikes with hands/forepaws/pseudopods/feet and similar appendages. Without augmentation, punches and kicks have the following stats:

```
\begin{table}[!htbp]
\centering
\captionsetup{textformat=empty,labelformat=empty}
\caption{Punches and Kicks}
\begin{tabular}{@{}lcc@{}}
\toprule
& \multicolumn{1}{l}{Damage} & \multicolumn{1}{l}{Accuracy} \\ \midrule
Human Punch & & 0 \\
Human Kick & & -2 \\
Super Mutant Punch & & -2 \\
Super Mutant Kick & & -4 \\ \bottomrule
\end{tabular}
\end{table}
```

`\subsubsection{Single Shot}`

A single shot attack mode comes from a firearm. Though the weapon may have an explosion damage subtype, ultimately it is only fired at one target. Full damage listed for the weapon or ammo is applied to that target only.

`\subsubsection{Smashes, Swings and Thrusts}`

Smashes, swings and thrusts are melee attacks, though they are not always performed with melee weapons. Swings and thrusts are normally performed with standard melee weapons and have standard chances to hit. Smashes are performed with items that are not intended for hand-to-hand combat (e.g.: the butt of a rifle) and use the following statistics:

```
\begin{table}[!htbp]
\centering
\captionsetup{textformat=empty,labelformat=empty}
\caption{Smash Statistics}
\begin{tabular}{lcc}
\hline
& \multicolumn{1}{l}{Damage} & \multicolumn{1}{l}{Accuracy} \\ \hline
Small Item Smash & 2d3$ & 2$ \\ \hline
Large Item Smash & 2d6$ & 4$ \\ \hline
\end{tabular}
\end{table}
```

`\subsubsection{Spray}`

Spray attacks are typically used with "scatter" ammunition like buckshot or a wave gun. Spray attacks work somewhat like sweep attacks, but there are a few fundamental differences. First, each action only costs "one round" of ammo. E.g. one round of shot from a sawed-off shotgun can hit multiple targets. Like a sweep, a spray can hit a number of targets falling within a narrow cone or wide cone (usually non-adjustable, based on weapon). Unlike a sweep, attack rolls can be made at all targets in that cone unless the attacker has no line of sight to them. All attacks are rolled with a normal chance to hit. However, if attacks do hit, the damage rolled is reduced based on the distance the target is from the attacker. In a wide cone, for every hex away the target is, the damage is divided by that distance and rounded down. In narrow cone, for every two hexes away the target is, the damage is divided by that number and rounded down. E.g.: Bob fires his sawed-off shotgun in a wide cone and catches Tom and Frank. Tom is 3 hexes away and Frank is 6 hexes away. Bob hits both and rolls 25 and 32 damage against them, respectively. Tom takes 8 (25/3) damage and Frank takes 5 (32/6) damage.

`\subsubsection{Sweep}`

A sweep is a firearm attack mode meant to cover an arc in front of the character. Unlike a burst, which is focused at a single hex, the sweep intentionally moves across an arc. Sweep actions use burst data from

a weapon to determine how they work. To perform a sweep, a character must have at least as many AP as the burst action requires. Sweeps also use the same number of rounds as a burst. The player may divide all of the rounds of his or her burst between any number of targets as long as all targets are in hexes within or falling on the edge of a 60° cone (hex edge to hex edge or mid-face to mid-face). As with normal firearm single shots and bursts, no targets may be selected that are blocked by something between the attacker and the target. Targets must be specified before attacks are rolled. Once the targets are established, the attacker makes one roll against each target. All attack rolls suffer the worst penalty for a burst attack on the weapon. All rounds that hit do normal damage.

\subsubsection{Trip}

\subsection{Calculating to Hit}

To hit an opponent, a target must use an attack mode and specify a target for the attack mode that threatens that target (see attack modes). The chance for the attacker to hit the target is determined using the normal skills check. The "other modifiers" to hit typically include $\text{Range Penalty} + \text{Visibility Penalties} - \text{Proximity Penalty}$.

\subsubsection{Weapon Skill Total}

This is determined by the attack type from the attack mode and the character making the attack.

\begin{itemize}

\item Slash, Thrust, Weapon Butt, and Throw all use the character's total Melee

\item Kicks, Punches, Grabs, Sweep, and Disarm use all use the character's total Unarmed

\item Single Shot, Double Shot, Burst, Spray, Double Spray, and Sweep all use the character's total Firearms

\end{itemize}

\subsubsection{Range Penalty}

This is determined by the attack mode's range and the distance the target is from the subject. Range penalties only apply to thrown and fired attacks (e.g.: a grenade, a gun, etc.). The attack mode's range is the range at which the weapon suffers no penalties to hit. This is called Point Blank. There are four other ranges into which a target may fall. If a target falls within any of the subsequent ranges, there are increasing penalties to hit it. An attack cannot be made beyond Maximum Range.

```

\begin{table}[]
\centering
\captionsetup{textformat=empty,labelformat=empty}
\caption{Range Penalties}
\begin{tabular}{@{}lcc@{}}
\toprule
& \multicolumn{1}{l}{Range} & \multicolumn{1}{l}{Penalty} \\ \midrule
Point Blank &  $\times 1$  & None & \\
Close &  $\times 2$  & 2 & \\
Medium &  $\times 3$  & 4 & \\
Far &  $\times 4$  & 6 & \\
Maximum &  $\times 8$  & 8 & \\ \bottomrule
\end{tabular}
\end{table}

```

Special: Weapons with the Scope weapon accessory suffer an additional 10 penalty to hit when they use the Single Shot, Double Shot, Burst, Spray, Double Spray, or Sweep attack modes on targets within Point Blank range.

Size, Stance and Range Penalties

The above penalties for range assume that the creature is human sized (large). A small target, like a dwarf or small radscorpion, is effectively twice as far away for purposes of determining range penalties. Tiny targets, like scurry bots, are effectively three times as far away. Minute targets, like mice, are effectively four times as far away. Great targets, like huge radscorpions and security robots, are effectively half as far away. If a creature can change stance, it can effectively make its size smaller for purposes of range penalties. A crouching target is one size category smaller for purposes of range and cover. A prone target is two size categories smaller for the same purposes.

Visibility Penalty

Targets inflict penalties to hit on the attacker depending on how difficult it is for the attacker to see the target.

\begin{itemize}

\item Clearly Visible: No Penalty

\item Partially Obscured: 4 Penalty (dim lighting, light smoke)

\item Moderately Obscured: 8 Penalty (dark lighting, heavy smoke)

\item Heavily Obscured: 16 Penalty (only vaguely discernable)

\item Completely Obscured: 20 Penalty (can be detected by hearing only)

\end{itemize}

\subsubsection{Proximity Penalty}

Proximity penalties are applied to attack modes from specific types of weapons when an enemy is standing within one hex of them and is not stunned.

\begin{itemize}

\item Smash, Slash, Thust, Kicks, Punches, Grabs, Disarm, Sweep: No penalty

\item Single Shot, Double Shot, Throw, Lob, Bean, Burst, Spray, Double Spray, Sweep: 4 Penalty for one handed weapons, 8 Penalty for two-handed weapons

\end{itemize}

\subsubsection{Using Two Weapons}

Typically only used in situations of desperation or extreme advantage, characters can use a weapon in each hand simultaneously (or perform other actions simultaneously). The player chooses to perform two actions simultaneously. The actions must be logically possible one-handed. A character could not, for instance, fire one gun with their right hand and reload another gun with their left hand. Both actions can be performed, but both actions suffer an 8 penalty to any related skill rolls on top of all other penalties.

\subsection{Causing Damage}

Wow, you hit the target! Now it's time to calculate damage. All weapons or ammunition types have damage values associated with them. Roll the damage value for each target. Subtract the target's appropriate Damage Threshold (DT) for that damage type to arrive at final damage. Remember: DTs are applied on a per-hit basis. If a target is hit with six bullets, his or her DT is subtracted from each of the damage rolls.

\subsection{Critical Hits}

Critical hits in Simple are covered a bit differently than they were handled in SPECIAL. When a character hits a target, the normal assumption is that the hit is a "flesh wound" that has no secondary effects. If a character's attack roll is significantly over the required number to hit, the player or Overseer will have the option to execute a critical hit effect in addition to the damage total. For every 5 points over the number needed to hit, the attack gains one Critical Point. It is important to note that while all weapons are capable of doing critical damage, not all are capable of the other critical effects. Please refer to Weapons for details.

N.B.: If a critical hit results from an explosion, use the scatter diagram to determine where each point of the critical result goes. Critical results that fall in empty hex cones have no effect. The player is still free to assign critical effects for cinematic purposes.

\subsubsection{Critical Damage}

The most common application of critical points is for critical damage. When the character causes critical damage, each critical point allows the player to roll half of the base damage of the character's weapon (always one die).

\subsubsection{Critical Knockback}

Critical knockback allows the attacker to drive a standing target away. Every four points of damage rolled drives the target back one hex.

\subsubsection{Critical Knockdown}

Critical knockdown allow the the attacker to force the target to drop one stance for every critical point spent. Every four points of damage rolled drives the target down one stance.

\subsubsection{Critical Stun}

Critical stun allows the attacker to apply a stun effect to the target, effectively removing them from action. Every point of damage rolled goes into the target's stun pool. Please refer to Vital Status for rules on stun effects.

\subsection{Called Shots}

Called shots are an important part of `\textit{Fallout}` combat. They allow characters to inflict devastating status penalties on characters that would otherwise not be possible. A talented combatant can break limbs, cause internal bleeding, and even blind opponents. Called shots exist independently of the critical hit system, though a character with enough talent can stack the effects of a critical hit and called shot if his or her margin of success is high enough.

The difficulty of a called shot is directly proportional to the size of the body part being targeted. All body types in `Fallout` have body part sizes based on the size of individual limbs. To hit the target, penalties are applied as though the target is actually the size of the limb at range. Though there is no sequence penalty for taking a called shot, a failed roll is assumed to miss entirely.

```
\begin{itemize}
  \item Small---Human Torso, Human Leg
  \item Tiny---Human Arm, Human Head
  \item Minute---Human Eyes, Human Groin
\end{itemize}
```

If an attack hits, damage is rolled against that body part. The attack is considered a maim if it does less than 10% of the target's total hit points in damage. This turns into a break if the attack does 10% or more of the target's total hit points in damage. The Bone Head and Unbreakable perks can mitigate this.

```
\subsubsection{Maim Effects}
```

```
\begin{itemize}
  \item \textbf{Arm Maim:} All actions performed with that arm are at  $-8\%$ .
  \item \textbf{Arm Break:} Arm cannot be used for any action, including holding any item.
  \item \textbf{Eye Maim:} Vision damaged. All targets are lightly obscured. Double whammy: All targets are moderately obscured.
  \item \textbf{Eye Break:} Blinded. All targets are moderately obscured. Double whammy: All targets are completely obscured.
  \item \textbf{Head Maim:} IN, PE, and AG are all  $-2\%$ .
  \item \textbf{Head Break:} IN, PE, and AG are all  $-2\%$ . Character has 25% chance per round of falling/staying unconscious (will fall if standing).
  \item \textbf{Groin Maim:} All movement actions inflict double their AP cost in fatigue.
```


- \item \textbf{Groin Break:} Character falls prone and cannot stand or move without assistance.
 - \item \textbf{Leg Maim:} All actions performed with that leg are at $\frac{1}{2}$. Double whammy: Movement rates are halved (rounded down).
 - \item \textbf{Leg Break:} Leg cannot be used for any actions. Movement rates are halved (rounded down). Double whammy: Character falls prone and cannot stand or move without assistance.
 - \item \textbf{Torso Maim:} Character takes 10\% of damage inflicted by the attack per round after the first (rounded down).
 - \item \textbf{Torso Break:} Character takes 10\% of damage inflicted by the attack per round after the first (rounded down). Any damage inflicted on the target is also applied as fatigue.
- \end{itemize}

N.B.: A "double-whammy" applies when the status applies to both/all of the creature's eyes/legs. If a creature has more than two eyes/legs, the penalties for a single maim or break apply until all eyes/legs are maimed or broken.

\subsubsection{Removing a Maim or Break Status}

To remove a maim or break status, the character will have to have it fixed through the use of Medic or Mechanics (if the character is living or robot, respectively).

\section{Death and Fatigue}

When a character hits zero hit points, the character dies. Many games have a "Death's Door" buffer prior to death. \textit{Fallout} uses a fatigue scale to provide an occasional buffer to death's cold embrace. Armor can help convert damage into fatigue. When this happens, the character's fatigue, which starts at zero, goes up. Every round, on the character's turn, his or her fatigue goes down by his or her healing rate. If a character's fatigue is equal to or higher than his or her current hit points, the character is winded and suffers a 4 penalty to all skill checks and has half AP, rounded down. Once the character's fatigue falls below their current hit points, the character is no longer winded. If a character's fatigue ever passes their maximum hit points, the character passes out and falls to the ground. Once the character's fatigue falls below their maximum hit points, they regain consciousness.

\chapter{Advancement}

\part{Equipment}

\chapter{Survival Gear}

Survival gear is general equipment that doesn't fall under any of the other listed categories. It includes containers, non-chem-ish food, mechanical and electronic devices, and miscellaneous debris.

\section{Pip Boy 2000}

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Materials:} 2 Vacuum Tech, 1 Monitor Tech, 1 Plastic Tech

\noindent The Pip Boy 2000 is a very special piece of pre-war equipment that was used primarily by travelers. The Pip Boy holds a surprisingly large amount of information and can transfer data to and from holodiscs and from data tubes. It displays information in bright green on its black 5" x 3" screen. It can record sound and video footage for later playback. It uses a simple but elegant form of sonar and satellite tracking (where available, which is far from everywhere in the post-apocalyptic world) to map out areas where its user travels. Though input is slow, a user can also hand-enter and edit text messages on their Pip Boy 2000s. The original Pip Boy 2000 was a hand-held device, though some very cumbersome models were made to be worn on the arm. These models were unofficially called Pip Boy 2000 Plus.

\section{Lil' Pip 3000}

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Materials:} 2 Circuitry Tech, 1 Monitor Tech, 2 Plastic Tech

\noindent Much less cumbersome than the Pip Boy 2000 Plus, the Lil' Pip 3000 offers all the functionality of its smaller brother, and features two colors in addition to bright green for standard display: bright blue and bright red. It features a flip-up split-screen monitor and can be comfortably worn on the arm. Despite its many advantages, the Lil' Pip 3000 was not a sales success. The device was more fragile than the 2000 models and it used integrated circuits instead of vacuum tubes to achieve its small size.

\section{Pip Expansion Hardware}

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Materials:} 3 Vacuum Tech

All Pip Boy models can download and transfer data from holodiscs. All models can also accept expansion hardware. Expansion hardware comes in the form of data tubes, which are highly advanced, jam-packed vacuum tubes. Data tubes cannot be written to with Pip Boys, but their data can be accessed while they are connected. Pip Boy 2000 models can take six tubes, 2000 Plus models can take four, and Lil' Pip 3000s can take six.

\subsection{Battle Buddy}

Battle Buddy increases the Melee and Unarmed skill totals of the wearer by 1 while it is worn.

\subsection{Diplomat Buddy}

Diplomat Buddy increases the Investigate and Persuade skill totals of the wearer by 1 while it is worn.

\subsection{Motion Sensor}

When the Motion Sensor module is installed, all objects on the map that are currently moving will show

\subsection{Rad Counter}

When the Rad Counter is installed, the PC's pip boy will start to crackle as he or she approaches a radioactive area. The intensity and volume of the crackle will increase as the intensity of the radiation increases.

\subsection{Reloader Buddy}

Reloader Buddy increases the Firearms and Science skill totals of the wearer by 1 while it is worn.

\subsection{Spy Buddy}

Spy Buddy increases the Sneak and Deception skill totals of the wearer by 1 while it is worn.

\subsection{Survival Buddy}

Survival Buddy increases the Medic and Outdoorsman skill totals of the wearer by 1 while it is worn.

\subsection{Thief Buddy}

Thief Buddy increases the Security and Steal skill totals of the wearer by 1 while it is worn.

\subsection{Toxin Counter}

The Toxin Counter operates similarly to the Rad Counter, but for poisonous spills and creatures like radscorpions, thorn slingers, and giant two-headed snakes. Instead of crackling, the Toxin Counter beeps. The closer the toxin, the more frequent the beeps.

\subsection{Workshop Buddy}

Workshop Buddy increases the Mechanics skill totals of the wearer by 2 while it is worn.

\section{Stimpack}

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Materials:} 2 Chem Tech, 1 Metal Tech, 1 Plastic Tech

\noindent\textbf{Effects:} $\$+5\$$ --20 hit points ($\$+2\$$ per 10 points of user's Medic)

\section{Super Stimpack}

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Materials:} 3 Chem Tech, 1 Metal Tech, 1 Plastic Tech

\noindent\textbf{Effects:} $\$+50\$$ --75 hit points ($\$+2\$$ per 10 points of user's Medic)

\noindent\textbf{Special:} $\$+12\$$ fatigue (after 1 minute), $\$+12\$$ fatigue (after 2 minutes)

\chapter{Weapons}

What would a \textit{Fallout} game be without weapons? Well, it would still be a role-playing game, but sometimes the role you want to play is the guy who shoots people in the face. Players and Overseers should be able to find just about everything they need to lay waste to the myriad hostile creatures of

the wasteland. Weapons are divided up into seven categories: unarmed augmentation (increases punch damage), small melee, large melee, thrown, small firearm, large firearm, and traps. However, despite these distinctions, weapons sometimes can be used in multiple ways. For example, a combat shotgun can be used as a firearm (shooting) or a melee weapon (butt smash).

`\section{Making Weapons}`

To make weapons, characters need access to a Mechanics Shop, one of the workshops. They also need to have a working knowledge of Mechanics and Firearms. To make a workable Firearm, a character needs a skill total equal to or great than $\$20 \times \$$ the Tech Level of the item. E.g.: Bob wants to make a .22 Rifle. The .22 Rifle has a TL of 5, so he would need a skill total of 100 to make it. For Tech ingredients, use the following list:

`\begin{itemize}`

`\item \textbf{Autoloaders:} 2 Metal Tech, 2 Spring Tech + 1 Plastic Tech or 1 Wood Tech (grip)`

`\item \textbf{Machineguns:} 5 Metal Tech, 4 Spring Tech + 2 Plastic Tech or 2 Wood Tech (stock/grip)`

`\item \textbf{Miniguns:} 6 Metal Tech, 6 Spring Tech, 1 Motor Tech + 3 Vacuum Tech or 1 Circuitry Tech`

`\item \textbf{Revolvers:} 2 Metal Tech, 1 Spring Tech + 1 Plastic Tech or 1 Wood Tech (grip)`

`\item \textbf{Rifles/Shotguns:} 4 Metal Tech, 1 Spring Tech + 2 Plastic Tech or 2 Wood Tech (stock)`

`\item \textbf{Submachineguns:} 3 Metal Tech, 3 Spring Tech + 2 Plastic Tech or 2 Wood Tech (stock/grip)`

`\item \textbf{Plasma Weapons:} $\$+2\$$ Fusion Tech`

`\item \textbf{Laser Weapons:} $\$+1\$$ Fusion Tech, 1 Optics Tech`

`\item \textbf{Melee and Unarmed Weapons, $\$\mathrm{TL} < 4\$$:} A total of 2 Tech, Metal or Wood, as appropriate (4 Tech for Large)`

`\end{itemize}`

`\subsubsection{Special Weapons}`

`\begin{itemize}`

`\item \textbf{Flamethrower:} 5 Metal Tech, 1 Spring Tech`

`\item \textbf{Hand Flamer:} 3 Metal Tech, 1 Spring Tech`

`\item \textbf{Laser Saw:}` 2 Metal Tech, 1 Optics Tech, 1 Fusion Tech

`\item \textbf{Pistol Katar:}` 3 Metal Tech, 2 Spring Tech

`\item \textbf{Power Fist:}` 3 Metal Tech, 1 Motor Tech

`\item \textbf{Ripper:}` 4 Metal Tech, 1 Motor Tech, 1 Gear Tech + 3 Vacuum Tech or 1 Circuitry Tech

`\item \textbf{Tesla Glove:}` 3 Metal Tech, 2 Fusion Tech + 9 Vacuum Tech or 3 Circuitry Tech

An item takes a number of hours to make equal to Tech Level \times number of techs used. E.g.: A 9mm Autoloader (TL 6, Mechanics) requires: 2 Metal Tech, 2 Spring Tech + 1 Plastic Tech or 1 Wood Tech (grip). The character must have a Mechanics skill of 120, access to a Mechanics Shop, and must work on it for 30 hours (6 TL \times 5 Tech count).

`\end{itemize}`

If another character wants to assist, he or she may do so if he or she has half of the total skill requirements necessary. This cuts the total time required by 25%. Only one character may assist (two in the shop at a time).

`\noindent\textbf{Breakdown:}` In addition to salvaging Tech from creatures and ruins, characters may also breakdown items for Tech. Breaking down items takes half the time it requires to build it, requires half the skill, and yields half the tech (all rounded down). E.g.: Breaking down the afore-mentioned 9mm Autoloader would require a 60 Mechanics, access to a Mechanics Shop (or a Lil' Shop, since the requirement is under 75), take 15 hours, and give back 1 Metal Tech, 1 Spring Tech, and 0 Plastic/Wood Tech.

`\onecolumn`

`\section{Large Firearm}`

Large firearms typically include weapons like rifles, shotguns, machineguns, and rocket launchers. A large firearm fired one-handed suffers a -10 penalty to hit. They can be used as large improvised melee weapons at normal penalties to hit (used two-handed).

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`\begin{tabular}{@{}|l|l|l|l|@{}}`

`\toprule`

	& Ammo	& Capacity	& Range	& Modes
\\ \midrule				
.22 Rifle	& .22	& 5 Magazine	& 28	& Single Shot
\\				
.223 Assault Rifle	& .223	& 20 Magazine	& 30	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (6)\end{tabular}
\\				
.223 Minigun	& .223 and SEC	& 120 Belt and 1 SEC	& 28	& Burst (12)
\\				
.30 Hunting Rifle	& .30	& 5 Internal	& 35	& Single Shot
\\				
.30 Machinegun	& .30	& 120 Belt	& 32	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (6)\end{tabular}
\\				
.44 Hunting Rifle	& .44	& 7 Internal	& 23	& Single Shot
\\				
.45 Submachinegun	& .45	& 20 Magazine or 50 Drum	& 15	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (6)\end{tabular}
\\				
.50 Anti-Materiel Rifle	& .50	& 8 Magazine	& 45	& Single Shot
\\				
2mm Gauss Rifle	& 2mm EC and MFC	& 1 Internal and 1 MFC	& 45	& Single Shot
\\				
7.62mm Assault Rifle	& 7.62mm	& 20 Magazine	& 30	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (6)\end{tabular}
\\				
7.62mm Machinegun	& 7.62mm	& 120 Belt	& 30	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (6)\end{tabular}
\\				
7.62mm Sniper Rifle	& 7.62mm	& 5 Magazine	& 50	& Single Shot
\\				
9mm Pipe Rifle	& 9mm	& 1 Internal	& 10	& Single Shot
\\				
9mm Submachinegun	& 9mm	& 20 Magazine	& 16	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (6)\end{tabular}
\\				
40mm Grenade Launcher	& 40mm RG	& 1 Internal	& 25	& Single Shot
\\				
Combat Shotgun	& 12 ga.	& 7 Internal	& 8	& \begin{tabular}[c]{@{}@{}}Single Shot,\\ Burst (3)\end{tabular}
\\				

Compound Bow	& Arrow	& 1	& 15	& Single Shot
\\				
Crossbow	& Bolt	& 1	& 10	& Single Shot
\\				
Double-Barreled Shotgun	& 12 ga.	& 2 Internal	& 6	& \begin{tabular}[c]{@{}l@{}}Single Shot,\\ Double Shot,\\ Single Spray (Narrow Cone),\\ Double Spray (Narrow Cone)\end{tabular} \\
Flamethrower	& Napthate	& 4 Tank	& 6	& Single Spray (Narrow or Wide Cone)
\\				
Heavy Riveter	& Heavy Rivets	& 30 Internal	& 5	& Single Shot
\\				
Laser Arraygun	& SEC	& 1 SEC	& 25	& \begin{tabular}[c]{@{}l@{}}Single Shot,\\ Single Spray (Narrow or Wide Cone),\\ Overload \$\times 3\$\end{tabular} \\
Laser Rifle	& SEC	& 1 SEC	& 75	& \begin{tabular}[c]{@{}l@{}}Single Shot,\\ Overload \$\times 3\$\end{tabular} \\
Plasma Rifle	& MFC	& 1 MFC	& 10	& \begin{tabular}[c]{@{}l@{}}Single Shot,\\ Overload \$\times 3\$\end{tabular} \\
Pulse Rifle	& SEC	& 1 SEC	& 25	& \begin{tabular}[c]{@{}l@{}}Single Shot,\\ Overload \$\times 4\$\end{tabular} \\
Radiation Gun	& MFC	& 1 MFC	& 5	& \begin{tabular}[c]{@{}l@{}}Single Spray (Narrow or Wide Cone),\\ Overload \$\times 2\$\end{tabular} \\
Recurve Bow	& Arrow	& 1	& 10	& Single Shot
\\				
Rocket Launcher	& Rocket	& 1 Internal	& 22	& Single Shot
\\				
SleepMaker 2000	& .22 Injector	& 8 Internal	& 13	& Single Shot
\\				
Single-Barreled Shotgun	& 12 ga.	& 5 Internal	& 6	& \begin{tabular}[c]{@{}l@{}}Single Shot,\\ Single Spray (Narrow Cone)\end{tabular} \\
\\ \bottomrule				
\end{tabular}%				
}				
\caption{Large Firearms}				
\end{table}				

\noindent\textbf{Special:} Creatures hit by the flamethrower take half damage on the round after.


```
\section{Large Melee}
```

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```
        & Ammo & Capacity & Range & Modes          & Damage      \\ \midrule
```

```
Baseball Bat & --- & --- & 1 & Swing (12 AP) 2 AV & $1d8+2$ (3--10) \\
```

```
Fire Axe    & --- & --- & 1 & Swing (14 AP) 4 AV & $1d8+6$ (7--14) \\
```

```
Sledgehammer & --- & --- & 1 & Swing (16 AP) 4 AV & $1d8+4$ (5--12) \\
```

```
Spear      & --- & --- & 1 & Thrust (10 AP) 5 AV & $1d10+2$ (3--12) \\
```

```
Super Sledge & MFC & 1 MFC & 1 & Swing (18 AP) 4 AV & $2d8+8$ (10--24) \\ \bottomrule
```

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```
\caption{Large Melee Weapons}
```

```
\end{table}
```

```
\section{Small Firearms}
```

Small firearms are small enough to be fired with one hand. They can be used as improvised melee weapons for a Smash at normal penalties (not used two-handed).

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```

```
        & Ammo      & Capacity    & Range & Modes
```

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\\ \midrule
```

.22 Autoloader & .22 & 11 Magazine & 6 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Burst (3)\end{tabular} \\ \\

.223 Autoloader & .223 & 13 Magazine & 5 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Burst (3)\end{tabular} \\ \\

.44 Revolver & .44 & 6 Revolver & 6 & Single Shot \\ \\

.45 Autoloader & .45 & 6 Revolver & 6 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Burst (3)\end{tabular} \\ \\

.45 Revolver & .45 & 6 Revolver & 6 & Single Shot \\ \\

.50 Revolver & .50 & 5 Revolver & 5 & Single Shot \\ \\

2mm Gauss Pistol & 2mm EC and MFC & 1 Internal and 1 MFC & 10 & \\ \\

9mm Autoloader & 9mm & 13 Magazine & 5 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Burst (3)\end{tabular} \\ \\

9mm Machine Pistol & 9mm & 20 Magazine & 4 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Burst (9)\end{tabular} \\ \\

9mm Zip Gun & 9mm & 1 Internal & 3 & Single Shot \\ \\

Hand Crossbow & Bolt & 1 & 5 & Single Shot \\ \\

Hand Flamer & Naphate & 1 Tank & 2 & Single Spray (Narrow or Wide Cone) \\ \\

Laser Pistol & SEC & 1 SEC & 20 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Overload (\$\times 3\$)\end{tabular} \\ \\

Lil' Riveter & Lil' Rivets & 20 Internal & 4 & Single Shot \\ \\

MiniSleepy 65 & .22 Injector & 3 Internal & 6 & Single Shot \\ \\

Plasma Pistol & MFC & 1 MFC & 3 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Overload (\$\times 3\$)\end{tabular} \\ \\

Pulse Pistol & SEC & 1 SEC & 15 & \begin{tabular}[c]{@{}|@{}}Single Shot,\\ Overload (\$\times 4\$)\end{tabular} \\ \\

Sawed-Off Shotgun & 12 ga. & 2 & 3 & \begin{tabular}{c}{@{}|@{}}Single Shot,\\ Double Shot,\\ Single Spray (Wide Cone),\\ Double Spray (Wide Cone)\end{tabular} \\ \bottomrule

\end{tabular}%
 }
 \caption{Small Firearms}
 \end{table}

\noindent\textbf{Special:} Creatures hit by the hand flamer take half damage on the round after.

\section{Small Melee}

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\begin{tabular}{@{}|l|l|l|l|l|@{}}

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	& Ammo	& Capacity	& Range	& Modes	&
Damage	\midrule				
Arc Welder	& SEC	& 2 SEC	& 1	& Swing (9 AP) 3 AV	&
\$1d6+10\$ (11--16) Energy	\				
Cattle Prod	& SEC	& 1 SEC	& 1	& \begin{tabular}{c}{@{} @{}}Thrust (8 AP),\\ Overload \$\times\$ 3\$,\\ \ 3 AV\end{tabular} & \$1d6+4\$ (5--10) Energy	\
Chinese Hook Sword	& ---	& ---	& 1	& Swing (9 AP)	&
\$1d8+4\$ (5--12)	\				
Combat Knife	& ---	& ---	& 1	& Swing (7 AP), 3 AV	&
\$1d8+2\$ (3--10)	\				
Crowbar	& ---	& ---	& 1	& Swing (8 AP), 2 AV	& \$1d8\$
(1--8)	\				
Hatchet	& ---	& ---	& 1	& Swing (9 AP), 2 AV	&
\$1d8+2\$ (2--9)	\				
Heavy Wrench	& ---	& ---	& 1	& Swing (8 AP), 1 AV	&
\$1d6\$ (1--6)	\				

Kitchen Knife (1--6)	& --- & ---	& 1	& Swing (7 AP), 1 AV	& \$1d6\$
Laser Saw \$2d6+4\$ (6--16) Energy	& SEC & 1 SEC	& 1	& Swing (8 AP), 4 AV	&
Machete \$1d8+3\$ (4--11)	& --- & ---	& 1	& Swing (9 AP), 3 AV	&
Nightstick \$1d6+1\$ (2--7)	& --- & ---	& 1	& Swing (7 AP), 2 AV	&
Ripper \$2d6+4\$, (6--16)	& SEC & 1 SEC	& 1	& Swing (7 AP), 4 AV	&
Shiv (-6)	& --- & ---	& 1	& Thrust (6 AP), 4 AV	& \$1d6\$, (1-
Sling Blade \$1d8+3\$, (4--11)	& --- & ---	& 1	& Swing (8 AP), 3 AV	&
Switchblade (1--6)	& --- & ---	& 1	& Swing (7 AP), 2 AV	& \$1d6\$
Table Leg (1--6)	& --- & ---	& 1	& Swing (8 AP), 1 AV	& \$1d6\$

\end{tabular}%

}

\caption{Small Melee Weapons}

\end{table}

N.B. If you are a jawless Asian-American mutant living in the ruins of San Francisco, the Chinese Hook Sword might be the weapon for you!

\section{Thrown}

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\toprule

	& Range & Modes	& Damage	\\ \midrule
Bio Grenade	& Throw & Lob, Throw, 5 AV	& \$2d10+20\$ (22--40) Bio Explosion	\\
Dynamite	& Throw & Lob, Throw, 3 AV	& \$2d10+20\$ (22--40) Explosion	\\
EMP Grenade	& Throw & Lob, Throw, 7 AV	& \$5d10+30\$ (35--80) Energy (EMP) Explosion	\\
Flare	& Throw & Lob, Throw, 1 AV	& \$1d6/2\$ (1--3) Energy	\\
Frag Grenade	& Throw & Lob, Throw, 5 AV	& \$3d10+20\$ (23--50) Explosion	\\
Molotov Cocktail	& Throw & Lob, Throw, 3 AV	& \$2d8\$ (2--16) Energy (Fire) Explosion	\\
Plasma Grenade	& Throw & Lob, Throw, 5 AV	& \$5d10+30\$ (35--80) Energy Explosion	\\
Rock	& Throw & Throw, 1 AV	& \$1d6\$ (1--6)	\\
Throwing Knife	& Throw & Throw, 2 AV	& \$1d6+2\$ (3--8)	\\ \bottomrule

\end{tabular}%

}

\caption{Throwing Weapons}

\end{table}

\textbf{Special:} Creatures hit by the initial explosion of the Molotov Cocktail take half damage on the round after impact. Hexes hit by the initial explosion cause half damage to any creatures caught in them on the round after impact.

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\section{Traps}

\subsection{Door Bomb}

\noindent\textbf{Damage:} \$6d6+14\$ (20--50) Explosion, 3 AV

\noindent\textbf{Special:} Door bombs have a 10 Difficulty to set and a 15 Difficulty to disarm. They are triggered by the opening of a door and can have a delay of up to 5 minutes.

\subsection{Landmine}

\noindent\textbf{Damage:} \$4d6+14\$ (18--38) Explosion, 4 AV

\noindent\textbf{Special:} Landmines have a 5 Difficulty to set and a 10 Difficulty to disarm. They are triggered by pressure on their hex, set by the character for between 5 and 4000 lbs. They can have a delay of up to 60 seconds.

\subsection{Pulse Mine}

\noindent\textbf{Damage:} $6d10+40$ (46--100) Energy (EMP) Explosion, 6 AV

\noindent\textbf{Special:} Pulse mines have a 5 Difficulty to set and a 10 Difficulty to disarm. They are triggered by the presence within 10' of active electronics with a threshold of tiny, small, large, or great (creature size) set by the character. Multiple creatures can effectively count as a larger creature for purposes of setting a pulse mine off. They can have a delay of up to 60 seconds.

\subsection{Radio Bomb}

\noindent\textbf{Damage:} $6d6+14$ (20--50) Explosion, 3 AV

\noindent\textbf{Special:} Radio bombs have a 5 Difficulty to set and a 10 Difficulty to disarm. They are triggered by remote control on a radio frequency specified by the user (the remote control has to be capable of broadcasting on that frequency to set it off). Once a radio bomb is activated to receive a transmission, its tiny battery will remain active for 1 hour. After that time, it will not detonate.

\subsection{Steel Trap}

\noindent\textbf{Damage:} $2d8+6$ (8--22), 4 AV

\noindent\textbf{Special:} Steel traps have a 5 Difficulty to set and disarm. They are triggered by pressure on their hex, set by the character for between 5 and 4000 lbs. When a steel trap is sprung, it automatically hits and causes a leg maim (check damage to see if the result is a maim or a break). A steel trap on a character's leg causes all movement rates to cost an additional AP until it is removed (8 ST, 50 Difficulty Mechanics, or 25 Difficulty Security).

\subsection{Time Bomb}

\noindent\textbf{Damage:} $6d6+14$ (20--50) Explosion, 3 AV

\noindent\textbf{Special:} Radio bombs have a 5 Difficulty to set and a 15 Difficulty to disarm. They are triggered when a timer expires. The timer can be set to any value between 5 seconds and 24 hours.

\onecolumn

\section{Unarmed Augmentation}

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\toprule

	& Ammo	& Capacity	& Damage	\\ \midrule
Brass Knuckles	& ---	& ---	& \$+4\$ to all punch damage	\\
Pistol Katar	& .50	& 3 Internal	& \$1d8+2\$ (3--10) 5 AV + .50 cal damage	\\
Power Fists	& SEC	& 1 SEC	& \$1d8+8\$ (9--16)	\\
Tesla Glove	& SEC or MFC	& 1 SEC and 1 MFC	& By ammo	\\ \bottomrule

\end{tabular}%

}

\caption{Unarmed Weapons}

\end{table}

\noindent\textbf{Special:} The pistol katar is a specialized unarmed weapon. When the attacker makes a successful punch and does damage to the target (not fatigue), he or she can opt to fire one of the three .50 bullets into the target, bypassing armor.

\noindent\textbf{Special:} The Tesla glove can be used in one of two ways. When punching, it hits the target for normal punching damage and then inflicts MFC damage on top of that. It can also use its SEC to generate a narrow or wide cone electrical energy attack with a range of 3.

\twocolumn

\section{Weapon Mods}

Weapon mods are pieces of equipment that can be effectively "socketed" onto a weapon to modify the weapon's properties. Unlike weapon attributes (below), weapon mods are physical pieces of equipment that can be removed and used as stand-alone items. Most weapon mods have a caliber associated with them upon creation or discovery. Such mods can only be used on equipment of a like caliber. E.g.: A 9mm extended magazine could be used on a 9mm autoloader or a 9mm submachinegun, but not on a .45 autoloader. Every weapon mod occupies a slot on the weapon. Only one item can occupy a slot at any given time.

\subsection{Brass Bin}

Brass bins can be used on all conventional belt-fed submachineguns, assault rifles, machineguns, and miniguns. The Brass Tech from all fired rounds is automatically deposited in the brass bin.

\subsection{Silencer}

\noindent\textbf{Caliber-specific Slot:} Muzzle Silencers can be used on all conventional ballistic autoloaders, rifles, machinepistols, machineguns, submachineguns and assault rifles. Weapons equipped with a silencer have their Noise Level reduced by 10.

\subsection{Suppressor}

\noindent\textbf{Caliber-specific Slot:} Muzzle A suppressor can be used on all conventional ballistic autoloaders, rifles, machinepistols, machineguns, submachineguns and assault rifles. The amount of Muzzle Flash generated by the weapon is reduced by 10.

\chapter{Ammunition and Fuel}

Ammunition is used in a variety of firearms, melee weapons, and even a few unarmed weapons (like the Power Fist). They run the gamut from the humble rivet to the mighty Micro-Fusion Cell (MFC).

\section{Ammo Variants}

Some types of ammunition can support variants. Variants modify the base properties of the ammo. Ammo variants often cost more money than standard ammo. Characters with a high Mechanics skill can also manufacture ammo variants.

\begin{itemize}

\item AP---Armor Piercing---\$+2\$ AV, \$+2\$ Damage

\item BH---Broadhead Arrows---\$+1\$ AV, \$+4\$ Damage

- \item DD---Dum Dum---\$-2\$ AV, \$+4\$ Damage
- \item EMP---Electromagnetic Pulse---Does EMP damage
- \item FMJ---Full Metal Jacket---No modifiers; standard firearm ammo
- \item Frag---Fragmentation---Does Normal damage
- \item HE---High Explosive---Does Normal damage
- \item HP---Hollow Point---\$-1\$ AV, \$+4\$ Damage
- \item HV---High Velocity---No modifiers; standard rivet ammo
- \item IL---Illumination---Explodes into a huge light
- \item JHP---Jacketed Hollow Point---\$-1\$ AV, \$+4\$ Damage
- \item NAI---Nerve Agent Injector---Injects nerve agents into the target if it does damage (not fatigue)
- \item PC---Plasma Charge---Does Heat (Plasma) damage
- \item Plasma---Plasma---Does Heat (Plasma) damage
- \item Shot---Shotgun Shot---Standard 12 ga. ammo. Spray attack. \$+50\%\$ DT
- \item SI---Sedative Injector---Injects sedative into the target if it does damage (not fatigue)
- \item Slug---Shotgun Slug---\$+2\$ AV (no spray)
- \item TI---Toxin Injector---Injects poison into the target if it does damage (not fatigue)
- \item TR---Training Arrows---These are standard arrows.

\end{itemize}

\section{Ammo Types}

\subsection{12 ga.}

Shot, Slug / \$1d6+18\$ (19--24)

\noindent\textbf{Ingredients:} 2 Propellant, 1 Metal, 1 Plastic, 1 Brass

\noindent\textbf{Tech Level:} 5

\noindent 12 gauge shotgun ammunition is relatively easy to make and is only found in shotguns (sawed-off, standard, and combat).

\subsection{.223 cal}

FMJ, JHP, AP / \$1d10+20\$ (21--30)

\noindent\textbf{Ingredients:} 2 Propellant, 1 Metal, 2 Brass

\noindent\textbf{Tech Level:} 7

\noindent .223 ammunition is used primarily in assault rifles and miniguns, though it occasionally is used in odd handguns.

\subsection{.22 cal}

FMJ / \$1d8+1\$ (2--9)

\noindent\textbf{Ingredients:} 1 Propellant, 1 Metal, 1 Brass

\noindent\textbf{Tech Level:} 6

\noindent .22 is a very light caliber reserved for handguns and rifles. A variant of .22, called injector, is used in specialized tranquilizer guns.

\subsection{.22 Injector}

SI, NAI, TI / \$1d6\$ (1--6)

\noindent\textbf{Ingredients:} 1 Propellant, 1 Metal, 1 Brass, 1 Medic

\noindent\textbf{Tech Level:} 7

\noindent .22 Injector ammo is not very damaging, but it is not meant to be. The dart simply serves to inject one of three flavors of chemical concoctions in the target. Though robots are immune to the substances, most other creatures are quite vulnerable.

\subsection{2mm EC}

Standard / $\$2d6+15$ (17--27) / $\$-20$ DT

\noindent\textbf{Ingredients:} 6 Metal, 1 Fusion

\noindent\textbf{Tech Level:} 8

\noindent 2mm EC is the ``standard'' (but still extremely rare) form of ammunition used in gauss rifles. They pack less of a punch than the 15mm EC, but are still very bad news for armor.

\subsection{.30 cal}

FMJ, JHP, AP / $\$1d10+25$ (26--35)

\noindent\textbf{Ingredients:} 2 Propellant, 1 Metal, 2 Brass

\noindent\textbf{Tech Level:} 6

\noindent An American favorite, the .30 rounds are used exclusively in rifles and machineguns.

\subsection{40mm Rifle Grenade}

Frag, IL / $\$10d6$ (10--60)

\noindent\textbf{Ingredients:} 10 Propellant, 4 Metal

\noindent\textbf{Tech Level:} 6

40mm rifle grenades can be fired from a stand-alone rifle grenade launcher or an underslung rifle grenade launcher. They have a much higher range than thrown grenades, but tend to do less damage.

.44 cal

FMJ, HP, AP, DD / 14.5 (15--22)

Ingredients: 2 Propellant, 1 Metal, 1 Brass

Tech Level: 6

Used in a massive handgun and the occasional rifle, .44 is one of the most powerful calibers in common use in the Core Region.

.45 cal

FMJ, HP, AP, DD / 8.6 (9--16)

Ingredients: 1 Propellant, 1 Metal, 1 Brass

Tech Level: 6

The .45 caliber packs more of a punch than its 9mm brother, but it lacks slightly in armor penetration. It is used in revolvers, autoloaders, and submachineguns.

.50 cal

FMJ, JHP, AP / 10.6 (21--30)

Ingredients: 3 Propellant, 2 Metal, 2 Brass

Tech Level: 7

\noindent The dreaded .50 caliber round is used in three weapons: an anti-material rifle, a gargantuan handgun, and the strange "pistol katar". The first two weapons require high strength to wield, but .50 rounds are the most powerful conventional rounds in the game.

\subsection{7.62mm}

FMJ, JHP, AP / \$1d10+15\$ (16--25) / \$-10\$ DT

\noindent\textbf{Ingredients:} 2 Propellant, 1 Metal, 2 Brass

\noindent\textbf{Tech Level:} 7

\noindent The high velocity of the 7.62mm round makes it ideal for long range sniper rifles and assault weapons, but it often over-penetrates when it hits a target. While the .223 round is used against soft targets, the 7.62mm is used against armored opponents and other hard targets like robots.

\subsection{9mm}

FMJ, HP, AP, DD / \$1d8+4\$ (5--12) / \$-10\$ DT

\noindent\textbf{Ingredients:} 1 Propellant, 1 Metal, 1 Brass

\noindent\textbf{Tech Level:} 6

\noindent The plentiful 9mm round is a favorite in handguns and submachine guns. There's even a wildly-inaccurate one-handed machine pistol that uses 9mm rounds. 9mm rounds aren't very damaging, but they are plentiful and can slip past light armor.

\subsection{Arrow}

TR, BR / \$1d6\$ (1--6)

\noindent\textbf{Ingredients:} 1 Metal, 1 Wood, 1 Fauna

\noindent\textbf{Tech Level:} 2

\noindent Arrows are common among tribals, who use them for hunting, raiding, and defending their lands.

\subsection{Bolt}

TR, BR / $1d6$ (1--6)

\noindent\textbf{Ingredients:} 1 Metal, 1 Wood, 1 Fauna

\noindent\textbf{Tech Level:} 3

\noindent Bolts are common among tribals and poor caravan guards. They are also often used for quiet killing.

\subsection{MFC}

Standard / $2d6+20$ (22--32) Energy

\noindent Micro-fusion cells are used for a variety of purposes, but most often are used to generate the intense power required for plasma weapons. A fully charged MFC contains 10 charges.

\subsection{Naphate}

Standard / $5d10$ (5--50) Energy

\noindent Manufactured from a special blend of traditional napalm ingredients and ammonium nitrate, naphate is used in flame weapons like the hand flamer and flamethrower.

\subsection{Heavy Rivet}

HV, AP / $1d10+10$ (11--20) / -10 DT

\noindent Heavy rivets are only used in heavy riveters. They consist of the rivet itself and an explosive propellant charge.

\subsection{Lil' Rivet}

HV, AP / 10^5 (6--15) / 10^8 DT

\noindent Lil' rivets are only used in lil' riveters. They consist of the rivet itself and an explosive propellant charge.

\subsection{Rocket}

HE, IL, EMP, PC / 10^6 $\times 10^8$ (40--90) Explosion

\noindent Rockets come in a variety of forms, but all are fired from a standard rocket launcher. A target directly hit by a rocket is in big trouble, and those standing nearby are often sent flying as well.

\subsection{SEC}

Standard / 10^{10} (11--20) Energy

\noindent Normally used to power laser weapons, small energy cells are also occasionally used for mundane electrical purposes like the powering of a minigun. A fully charged SEC contains 20 charges.

\section{Reloading Ammunition and Fuel}

Characters in Fallout can't fire bullets forever. When they run out, it's time to reload. The cost for reloading varies by the type of the reloading being done. Clearing means to release/remove the item. The magazines/shells/etc. drop to the ground after being cleared unless the character wants to catch it in his or her other hand (assuming it is not holding something else) as a free action. Loading means that the character places an item full of ammo into the receiver. This is not done with individual rounds, which are packed. Packing means that the character is placing a single round into the item, one at a time.

\begin{itemize}

\item Clear: Move, Can Charge
\item Load: Move, Can Charge
\item Clear \& Load: Move, Cannot Charge
\item Pack (2): Move, Can Charge
\item Clear and Pack (2): Move, Cannot Charge
\end{itemize}

\chapter{Armor}

\section{ATHENA Project (Body/Head)}

\noindent\textbf{Ingredients:} ???

\noindent\textbf{Tech Level:} 9

\noindent\textbf{Ballistic:} ??? \textbf{Bio:} ??? \textbf{Electric:} ??? \textbf{EMP:} ??? \textbf{Hard:} ??? \textbf{Heat:} ???

\noindent An incomplete power armor project pioneered by the Enclave in conjunction with Poseidon Energy. According to initial tests, it had defensive capabilities above and beyond any other infantry armor in use before the apocalypse.

\section{Combat Armor (Body)}

\noindent\textbf{Ingredients:} 5 Ceramics, 5 Plastic, 3 Textile

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 16, \textbf{Bio:} 12, \textbf{Energy:} 8

\noindent Worn by the more mobile units that accompanied power armor troops prior to the war, combat armor offers protection without sacrificing mobility or fine motor control.

\section{Combat Helmet (Head)}

\noindent\textbf{Ingredients:} 3 Ceramics, 3 Plastic, 1 Textile

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 16, \textbf{Bio:} 12, \textbf{Energy:} 8

\noindent Worn by the more mobile units that accompanied power armor troops prior to the war, combat armor offers protection without sacrificing visibility.

\section{Construction Helmet (Head)}

\noindent\textbf{Ingredients:} 5 Plastic

\noindent\textbf{Tech Level:} 6

\noindent\textbf{Normal:} 8, Bio: 2, Energy: 4

\noindent Your standard, run-of-the-mill yellow construction helmet.

\section{Environmental Armor (Body)}

\noindent\textbf{Ingredients:} 10 Plastic, 2 Medic

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 6, \textbf{Bio:} 16, \textbf{Energy:} 12

\noindent \$-10\$ Sneak

\noindent Environmental armor was developed for use in heavily contaminated environments, and is prized in the wasteland for its ability to protect against biological threats.

\section{Environmental Helmet (Head)}

\noindent\textbf{Ingredients:} 6 Plastic, 1 Medic

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 6, \textbf{Bio:} 16, \textbf{Energy:} 12

\noindent Environmental armor was developed for use in heavily contaminated environments, and is prized in the wasteland for its ability to protect against biological threats.

\section{Hei Gui Armor (Body/Head)}

\noindent\textbf{Ingredients:} ???

\noindent\textbf{Tech Level:} 9

\noindent\textbf{Ballistic:} ??? \textbf{Bio:} ??? \textbf{Electric:} ??? \textbf{EMP:} ??? \textbf{Hard:} ??? \textbf{Heat:} ???

\noindent The Chinese solution to invasion by U.S. forces in power armor was its Hei Gui stealth armor, worn by elite Chinese "Black Ghost" counterinsurgency/terror units. Not much was known about this armor, save that it had active camouflage systems as well as technology that enhanced reflexes and heightened perception. Hei Gui technology was the basis for the unstable "Stealth Boy" wrist units developed in the U.S.

\section{HERMES Project (Body/Head)}

\noindent\textbf{Ingredients:} ???

\noindent\textbf{Tech Level:} 9

\noindent\textbf{Ballistic:} ??? \textbf{Bio:} ??? \textbf{Electric:} ??? \textbf{EMP:} ??? \textbf{Hard:} ??? \textbf{Heat:} ???

\noindent An incomplete combat armor project pioneered by the Enclave in conjunction with Poseidon Energy. Theoretically, it offered all of the protection of power armor without the cumbersome weight or strength enhancements.

\section{Leather Armor (Body)}

\noindent\textbf{Ingredients:} 6 Fauna, 4 Plastic

\noindent\textbf{Tech Level:} 6

\noindent\textbf{Normal:} 8, \textbf{Bio:} 6, \textbf{Energy:} 4

\noindent Leather armor looks something like a motorcycle rider's heavy track outfit. It consists of thick pads covered by a tight leather surface.

\section{Leather Outfit (Body)}

\noindent\textbf{Ingredients:} 8 Fauna

\noindent\textbf{Tech Level:} 2

\noindent\textbf{Normal:} 6, \textbf{Bio:} 4, \textbf{Energy:} 4

\noindent Leather outfits are made of scraps of leather and layers of heavy cloth. They are all mismatched pieces of armor slapped together into an ``outfit".

\section{Metal Armor (Body)}

\noindent\textbf{Ingredients:} 8 Metal

\noindent\textbf{Tech Level:} 4

\noindent\textbf{Normal:} 16, \textbf{Bio:} 8, \textbf{Energy:} 2

\noindent \$-20\$ Sneak

\noindent An awful alternative to combat armor, metal armor is heavy and noisy. It was only used in pre-war times because it was cheaper and quicker to manufacture than the high tech combat and power armor suits.

\section{Metal Outfit (Body)}

\noindent\textbf{Ingredients:} 8 Metal

\noindent\textbf{Tech Level:} 3

\noindent\textbf{Normal:} 12, \textbf{Bio:} 4, \textbf{Energy:} 0

\noindent \$-20\$ Sneak

\noindent Metal outfits are pieces of road signs, car doors, and other debris that is made to protect primarily against normal damage. These are all mismatched pieces of armor slapped together into an "outfit".

\section{Motorcycle Helmet (Head)}

\noindent\textbf{Ingredients:} 5 Plastic

\noindent\textbf{Tech Level:} 7

\noindent\textbf{Normal:} 12, \textbf{Bio:} 4, \textbf{Energy:} 2

\noindent \$-1\$ PE

\noindent A standard impact-resistant motorcycle helmet.

\section{Power Armor (Body)}

\noindent\textbf{Ingredients:} 8 Metal, 4 Motor, 4 Hydraulic, 8 Circuitry, 3 Plastic

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 24, \textbf{Bio:} 16, \textbf{Energy:} 12

\noindent \$+2\$ ST, \$-2\$ AG, \$-50\$ Sneak, \$-40\$ Medic, Steal, Security

\noindent This is the classic t-51b power armor used by U.S. troops immediately prior to the drop of the bombs. Though it is very powerful, the wearer is significantly penalized while wearing it.

\section{Power Helmet (Head)}

\noindent\textbf{Ingredients:} 3 Metal, 2 Circuitry, 3 Polymer

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 24, \textbf{Bio:} 16, \textbf{Energy:} 12

\noindent \$-1\$ PE

\noindent This is the classic t-51b power armor used by U.S. troops immediately prior to the drop of the bombs. Though it is powerful, the wearer is somewhat penalized while wearing it.

\section{Scav Outfit (Body)}

\noindent\textbf{Ingredients:} 8 Textile, 6 Plastic

\noindent\textbf{Tech Level:} 6

\noindent\textbf{Normal:} 2, \textbf{Bio:} 6, \textbf{Energy:} 6

\noindent Scav outfits appear to be rags, pieces of plastic, and other bits of debris designed to protect against biological and energy attacks. These are all mismatched pieces of armor slapped together into an "outfit".

\section{Tesla Armor (Body)}

\noindent\textbf{Ingredients:} 12 Metal, 15 Vacuum, 2 Fusion

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 12, \textbf{Bio:} 16, \textbf{Energy:} 24

\noindent \$-20\$ Sneak

\noindent Tesla armor is constructed from plans left by Nikola Tesla decades before the war even started. Though his plans looked completely insane, they, of course, worked like a charm.

\section{Tesla Helmet (Head)}

\noindent\textbf{Ingredients:} 4 Metal, 5 Vacuum, 1 Fusion

\noindent\textbf{Tech Level:} 8

\noindent\textbf{Normal:} 12, \textbf{Bio:} 16, \textbf{Energy:} 24

\noindent Tesla armor is constructed from plans left by Nikola Tesla decades before the war even started. Though his plans looked completely insane, they, of course, worked like a charm.

\chapter{Chems}

\section{Afterburner Gum}

\noindent\textbf{Up Effects:} $\$+4$ AP, $\$+2$ PE, $\$+3$ healing rate (4 hours)

\noindent\textbf{Down Effects:} $\$-2$ AP, $\$-2$ ST, $\$+10$ fatigue (4 hours after 4 hours)

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction:} 20\%

\section{Antidote}

\noindent\textbf{Up Effects:} Removes one poison effect and all associated sub-effects

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} None

\noindent\textbf{Addiction:} None

\section{Beer}

\noindent\textbf{Up Effects:} $\$-1$ PE, $\$+2$ All DTs (2 hours)

\noindent\textbf{Down Effects:} $\$-1$ PE (2 hours after 2 hours)

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction:} None

\section{Booze}

\noindent\textbf{Up Effects:} $\$-1$ IN, $\$-2$ PE, $\$-1$ AG, $\$+4$ All DTs (2 hours)

\noindent\textbf{Down Effects:} $\$-2$ PE, $\$-4$ All DTs (2 hours)

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction Chance:} 5\%

\section{Buffout}

\noindent\textbf{Up Effects:} $\$+2$ ST, $\$+2$ AG, $\$+3$ EN (6 hours)

\noindent\textbf{Down Effects:} $\$-4$ ST, $\$-4$ AG, $\$-4$ EN (18 hours after 6 hours)

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction:} 25\%

\section{Gamma Gulp Beer}

\noindent\textbf{Up Effects:} $\$-4$ Rad Count (no expire), +5\% radiation resistance, $\$-1$ PE (2 hours)

\noindent\textbf{Down Effects:} $\$-1$ CH, $\$-1$ PE (2 hours after 2 hours)

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction:} 5\%

\section{Glow Ointment}

\noindent\textbf{Up Effects:} +50\% Radiation Resistance, $\$-2$ IN, $\$-1$ CH (24 hours)

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction:} None

\noindent\textbf{Special:} Outdoorsman equivalent of Rad-X

\section{Healing Powder}

\noindent\textbf{Up Effects:} \$+8\$--18 hit points, \$-2\$ PE (36 hours)

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} None

\noindent\textbf{Addiction:} 5\%

\noindent\textbf{Special:} Outdoorsman equivalent of Stimpak

\section{Jet}

\noindent\textbf{Up Effects:} \$+6\$ AP, \$+1\$ ST, \$+1\$ PE (48 hours)

\noindent\textbf{Down Effects:} \$-6\$ AP, \$-3\$ ST, \$-3\$ PE (48 hours after 48 hours)

\noindent\textbf{Cumulative O.D.:}

\noindent\textbf{Addiction:} 50\%

\section{Mentats}

\noindent\textbf{Up Effects:} \$+2\$ IN, \$+2\$ PE, \$+1\$ CH

\noindent\textbf{Down Effects:} \$-4\$ IN, \$-4\$ PE, \$-3\$ CH

\noindent\textbf{Cumulative O.D.:} TBD

\noindent\textbf{Addiction:} 15\%

\section{Mutated Fruit}

\noindent\textbf{Up Effects:} \$+4\$ hit points, \$+2\$ rad count (never expires)

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} 0\%

\noindent\textbf{Addiction:} None

\section{Nuka-Cola}

\noindent\textbf{Up Effects:} \$-8\$ Fatigue

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} 0\%

\noindent\textbf{Addiction:} 10\%

\section{Psycho}

\noindent\textbf{Up Effects:} \$+3\$ AG, \$-3\$ IN, \$+2\$ EN, \$+4\$ Healing Rate (4 hours)

\noindent\textbf{Down Effects:} $\$-3\$$ AG, $\$-3\$$ PE, $\$-2\$$ EN, $\$-2\$$ Healing Rate (8 hours after 4 hours)

\noindent\textbf{Cumulative O.D.:} TBD

\noindent\textbf{Addiction:} 20\%

\section{Rad-Away}

\noindent\textbf{Up Effects:} $\$-25\$$ Rad Count (Immediately), $\$-25\$$ Rad Count (2 hours), $\$-25\$$ Rad Count (4 hours)

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} TBD

\noindent\textbf{Addiction:} 10\%

\section{Rad-X}

\noindent\textbf{Up Effects:} +50\% Radiation Resistance (24 hours)

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} TBD

\noindent\textbf{Addiction:} None

\section{Roentgen Rum}

\noindent\textbf{Up Effects:} +20\% Radiation Resistance, $\$-2\$$ PE, $\$-2\$$ AG (2 hours)

\noindent\textbf{Down Effects:} $\$-2\$$ PE (2 hours after 2 hours)

\noindent\textbf{Cumulative O.D.:} TBD

\noindent\textbf{Addiction:} 5\%

\section{Venom Heart}

\noindent\textbf{Up Effects:} \$-2\$ PE (4 hours) Removes one poison effect and all associated sub-effects

\noindent\textbf{Down Effects:} None

\noindent\textbf{Cumulative O.D.:} TBD

\noindent\textbf{Addiction:} None

\noindent\textbf{Special:} Outdoorsman equivalent of Antidote

\chapter{Implants}

Medical implants can be installed by NPCs or slapped into teammates by a trained party member doctor or a programmed auto-doc at a medical ward. A character can have as many implants as they have points of EN. However, such awesome power does not come without price. Most implants either lower the host's Electricity and EMP DTs or permanently add weight to their encumbrance.

\section{Auto-Psycho}

Auto-Psycho implants will, as the name implies, automatically inject a single dose of psycho into the character when their hit points drop below 50%. Once it is used, the implant is destroyed. This implant lowers the subject's Electricity and EMP resistances by 15.

\section{Bio-Regulators}

Bio-Regulators increase the subject's Endurance by 1. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Electropolymer Muscle Enhancers}

Electropolymer Muscle Enhancers increase the subject's Strength by 1. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Empathy Amplifier}

Empathy Amplifiers increase the subject's Charisma by 1. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Logic Sub-Processors}

Logic Sub-Processors increase the subject's Intelligence by 1. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{NEMEAN Armor Implants}

NEMEAN Armor Implants increase the subject's Ballistic and Hard DTs by 5. This implant adds 10 lbs. of weight to the subject's inventory permanently.

\section{NEMEAN Armor Implants, Stg. II}

Stage II NEMEAN Armor Implants increase the subject's Ballistic and Hard DTs by 10. This implant adds 15 lbs. of weight to the subject's inventory permanently.

\section{PHOENIX Thermal Implants}

PHOENIX Thermal Implants increase the subject's Heat and Electrical DTs by 5. This implant adds 10 lbs. of weight to the subject's inventory permanently.

\section{PHOENIX Thermal Implants, Stg. II}

Stage II PHOENIX Thermal Implants increase the subject's Heat and Electrical DTs by 10. This implant adds 15 lbs. of weight to the subject's inventory permanently.

\section{Rad Filters}

Rad Filters give the subject +25\% radiation resistance. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Rad Filters, Stg. I}

Stage II Rad Filters remove radiation poisoning at a rate of 1 rad every second. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Reflex Boosters}

Reflex Boosters increase the subject's Agility by 1. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Retinal Sharpeners}

Retinal Sharpeners increase the subject's Perception by 1. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Skeletal Reinforcements}

Skeletal Reinforcements give the subject the Unbreakable perk for free. This implant adds 20 lbs. of weight to the subject's inventory permanently.

\textbf{Toxin Binders}

Toxin Binders give the subject +25\% biological resistance. This implant lowers the subject's Electricity and EMP resistances by 20.

\section{Toxin Binders, Stg. II}

Stage II Toxin Binders remove poison and disease effects at a rate of 1 effect every minute (after infected). This implant lowers the subject's Electricity and EMP resistances by 20.

\onecolumn

\chapter{Books}

Properly speaking, books are used to raise skills. Normal books will increase a character's skill from 1 point if their skill is between 0 and 10. ``Volume 2'' books increase their skill between 1 point if their skill is between 11 and 20. Characters with skills outside of those ranges cannot use the books. Remember: points must be used to buy ranks. Tag! skills will receive double the benefit. A book may be used a total of 10 times before it falls apart. A character may only use a book of any given type once; he or she may not benefit from reading the same book over and over again. Characters with IN scores below 4 cannot benefit from books. It takes a number of eight-hour days equal to 11---IN to read a book and benefit from it.

\begin{table}[!htbp]

\centering

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\begin{tabular}{@{}|l|l|l|@{}}

\toprule

	& 0--10	& 11--20	\ \midrule
Athletics	& How to Be a World-Class Triathlete	& How to Be a World-Class Triathlete, Vol. 2	\ \
Academics	& Fun Facts	& Fun Facts, Vol. 2	\ \
Deception	& Big Fat Liars	& Big Fat Liars, Vol. 2	\ \
Firearms	& Guns and Bullets	& Guns and Bullets, Vol. 2	\ \
Investigation & Mystery!		& Mystery!, Vol. 2	\ \
Mechanics	& Dean's Mechanics	& Dean's Mechanics, Vol. 2	\ \
Medic	& First Aid Book	& First Aid Book, Vol. 2	\ \
Melee	& Medieval Weaponry Today	& Medieval Weaponry Today, Vol. 2	\ \
Outdoorsman	& Scout Handbook	& Scout Handbook, Vol. 2	\ \

Persuasion	& Making Friends	& Making Friends, Vol. 2	\\
Pilot	& Hot Pursuit!	& Hot Pursuit!, Vol. 2	\\
Security	& Home Security	& Home Security, Vol. 2	\\
Science	& Big Boy of Science	& Big Book of Science, Vol. 2	\\
Sneak	& Infiltration Techniques	& Infiltration Techniques, Vol. 2	\\
Steal	& Don't Steal This Book!	& Don't Steal This Book!, Vol. 2	\\
Unarmed	& Pugilist Quarterly	& Pugilist Quarterly, Vol. 2	\\ \bottomrule

\end{tabular}%

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\caption{Books}

\end{table}

\twocolumn

\chapter{Tools}

Tools are a necessary evil for most of the science skills. Without the proper tools, most of the science skills can only be used for knowledge purposes. However, the advanced versions of the tools have the added bonus of increasing the user's skill total for applied tasks. A ``fresh" tool starts with 10 charges. Performing different tasks with tools will cost different amounts of charges. When a tool runs out of charges, it is exhausted and can no longer be used.

\section{Doctor's Bag}

The doctor's bag is used with the medic skill. It gives a \$+5\$ bonus to checks.

\section{Electronic Security Kit}

The security kit is used with the security skill. It gives a \$+5\$ bonus to checks.

\section{First Aid Kit}

The first aid kit is used with the medic skill.

\section{Lil' Lab}

The lil' lab can be used to make ammo, books, chems, and implants that have skill requirements below 15.

\section{Lil' Shop}

The lil' shop can be used to make armor, weapons, and weapon accessories that have skill requirements below 15.

\section{Multitool Kit}

The multitool kit is used with the mechanics skill. It gives a \$+5\$ bonus to checks.

\section{Security Kit}

The security kit is used with the security skill.

\section{Tool Kit}

The tool kit is used with the mechanics skill.

\chapter{Vehicles}

\chapter{Workshops}

After the bombs, the greatest killer of the human race was ignorance. All of humanity's shared technological reliance on each other broke down. Even years after the vaults have opened, those who are wise in the ways of repairing and building machines are respected, if not worshipped. Characters who excel in the ``science'' skills (Mechanics, Medic, Outdoorsman, and Science) have the ability to repair and create equipment. However, they are not magicians. They need both materials and a workshop to get the job done. Building items involves four components: a workshop, ingredients, item tech level, and time.

\section{The Workshops}

There are four types of workshops in \textit{Fallout}: Mechanics Shops, Medic Stations, Outdoorsman Camps, and Science Labs.

\subsection{Mechanics Shops}

\textbf{Used For:} Conventional Weapons, Conventional Armor, Vehicles

These workshops, behind Outdoorsman Camps, are the most common in the wasteland. Mechanics shops are typically equipped with heavy physical tools (wrenches, screwdrivers, drills, vises, hammers, hacksaws, etc.) as well as heavy duty equipment like winches, integrated arc welders, table saws, and belt sanders.

Medic Stations

Used For: Implants, Chems

Medic Stations are relatively uncommon in the wasteland, generally only being found in pre-world hospitals. Medic Stations contain tables suitable for operating, full (or close to full) sets of operating scalpels, surgical tubing, bone saws, monitoring devices, and the like.

Outdoorsman Camps

Used For: Conventional Weapons, Conventional Armor, Ammunition, Chems

The most ubiquitous of all workshops, the humble Outdoorsman Camps can be found almost anywhere that tribals or other primitive groups of people live and work. Outdoorsman Camps consist of at least one large fire, a small set of stone or scrap metal knives, mortars and pestles for mixing and separating, and a healthy assortment of raw materials like saplings and herbs as well as animal hides, bones, and sinew. It is important to note that characters with a high enough Outdoorsman skill can create Outdoorsman Camps on their own.

N.B.: Due to the high flexibility of Outdoorsman Camps, no item with a Tech Level higher than 5 can be created at a camp. Also, all build and breakdown times are increased by 50%.

Science Labs

Used For: Ammunition, Plasma/Laser Weapons, Powered Armor

Science Labs are rare in the extreme in the post-apocalyptic world. They were not that common to begin with, and many have been either destroyed or stripped clean since the vaults opened. Also, due to the power requirements that many items require in Science Labs, many who find them cannot use them. Science Labs contain a huge amount of specialized equipment. Beakers, burners, test

tubes, laser optics, electromagnets, circuit boards and other items can all be found shoved into drawers and mounted on dusty tables.

\section{Ingredients}

All items in the \textit{Fallout} work can be broken down into more-or-less basic components. Instead of requiring players to track dozens of minute and specific ingredients, item recipes are made up of abstracted ingredient types. These items can be found as treasure in the wasteland or stripped out of other objects. Clever scavengers will know a potential source of ingredients on sight and will break it down as quickly as possible.

\begin{itemize}

- \item Brass Tech---Used for making most ammunition.
- \item Ceramics Tech---Used for some body armor.
- \item Chem Tech---Used in some chems and other items.
- \item Circuitry Tech---Used in all sorts of electronics.
- \item Combustion Tech---Used in some vehicles.
- \item Fauna Tech---Used in some armor, can be used in some TL 5 chems in Outdoorsman Camps.
- \item Flora Tech---Used in some TL 5 chems in Outdoorsman Camps.
- \item Fusion Tech---Used for energy weapons and a few other items.
- \item Gear Tech---Used in some items with gear-driven parts.
- \item Hydraulic Tech---Used in some vehicles and power armor.
- \item Medic Tech---Used for special medical items like stims, doctor bags, and implants.
- \item Metal Tech---Used in a lot of items.
- \item Motor Tech---Small motors, used in things like miniguns, power armor, etc.
- \item Optics Tech---Used in laser items.
- \item Plastic Tech---Used in a variety of items.
- \item Propellant Tech---Used for making conventional ammo and explosives.
- \item Pulley Tech---Used for bows, vehicles, and powered armor.
- \item Screen Tech---Used on anything with a monitor.
- \item Spring Tech---Small springs, used in a lot of guns and some other items.

\item Textile Tech---General cloth, used in a lot of assorted items.

\item Vacuum Tech---Any circuitry tech can be subbed with $3\times$ the amount of vacuum tech (to resist EMPs) but the item weight is also increased by 25\%.

\item Wood Tech---Used mostly for gun stocks and a lot of melee weapons.

\end{itemize}

\section{Item Tech Level and Time}

All items have a tech level, which defines how complex the item is and, generally speaking, gives a rough estimate of where it fell in the timeline of Earth's history.

\begin{enumerate}

\item Primitive, stone age---Extremely basic weapons and textile-based armor

\item Ancient, tribal---Flimsy melee weapons, flimsy metal and leather armor

\item Medieval---Reliable melee weapons, basic metal and boiled leather armor

\item Early Modern---Primitive firearms, advanced plate armor

\item Industrial Revolution---Reliable rifles, revolvers, steam tech, slow/short range cars, refined oil as fuel, lightbulbs, assembly lines, unreliable chems

\item World War Era---Grenades, early body armor, machineguns, tanks, bazookas, planes, basic automobiles, basic chems

\item Information Age---Modern computers with high communication abilities, advanced automatic weapons and composite body armor, jet planes, helicopters, laser-guided missiles, advanced chems

\item Cusp of Apocalypse - Personal laser weapons, powered armor, portable rail/coil guns, super-vacuum tech, proliferation of high volume small energy cells and micro-fusion cells

\item Survivor Era - Unknown frontiers of advanced technology

\end{enumerate}

Multiply the TL by 2 to arrive at the required skill total to make the item. E.g.: The .22 Rifle has a TL of 5, Mechanics. Thus, you would need a 10 Mechanics skill total to make it. An item takes a number of half hours to make equal to Tech Level \times the number of techs used. E.g.: A 9mm Autoloader (TL 6, Mechanics) requires: 2 Metal Tech, 2 Spring Tech + 1 Plastic Tech or 1 Wood Tech (grip). The character must have a Mechanics skill of 12, access to a Mechanics Shop, and must work on it for 15 hours ($[6 \text{ TL} \times 5 \text{ Tech count}] / 2$). If another character wants to assist, he or she may do so if he or she has

half of the total skill requirements necessary. This cuts the total time required by 50%. Only one character may assist (two in the shop at a time).

\section{Making Weapons}

To make weapons, characters need access to a Mechanics Shop, one of the workshops. They also need to have a working knowledge of Mechanics and Firearms. To make a workable Firearm, a character needs a skill total equal to or greater than $2 \times$ the Tech Level of the item. E.g.: Bob wants to make a .22 Rifle. The .22 Rifle has a TL of 5, so he would need a skill total of 10 to make it. For Tech ingredients, use the following list:

\begin{itemize}

- \item \textbf{Autoloaders:} 2 Metal Tech, 2 Spring Tech + 1 Plastic Tech or 1 Wood Tech (grip)
- \item \textbf{Machineguns:} 5 Metal Tech, 4 Spring Tech + 2 Plastic Tech or 2 Wood Tech (stock/grip)
- \item \textbf{Miniguns:} 6 Metal Tech, 6 Spring Tech, 1 Motor Tech + 3 Vacuum Tech or 1 Circuitry Tech
- \item \textbf{Revolvers:} 2 Metal Tech, 1 Spring Tech + 1 Plastic Tech or 1 Wood Tech (grip)
- \item \textbf{Rifles/Shotguns:} 4 Metal Tech, 1 Spring Tech + 2 Plastic Tech or 2 Wood Tech (stock)
- \item \textbf{Submachineguns:} 3 Metal Tech, 3 Spring Tech + 2 Plastic Tech or 2 Wood Tech (stock/grip)
- \item \textbf{Plasma Weapons:} + 2 Fusion Tech
- \item \textbf{Laser Weapons:} + 1 Fusion Tech, 1 Optics Tech
- \item \textbf{Melee and Unarmed Weapons, $\mathrm{TL} < 4$:} A total of 2 Tech, Metal or Wood, as appropriate (4 Tech for Large)

\end{itemize}

\subsection{Special Weapons}

\begin{itemize}

- \item \textbf{Flamethrower:} 5 Metal Tech, 1 Spring Tech
- \item \textbf{Hand Flamer:} 3 Metal Tech, 1 Spring Tech
- \item \textbf{Laser Saw:} 2 Metal Tech, 1 Optics Tech, 1 Fusion Tech
- \item \textbf{Pistol Katar:} 3 Metal Tech, 2 Spring Tech
- \item \textbf{Power Fist:} 3 Metal Tech, 1 Motor Tech

\item \textbf{Ripper:} 4 Metal Tech, 1 Motor Tech, 1 Gear Tech + 3 Vacuum Tech or 1 Circuitry Tech

\item \textbf{Tesla Glove:} 3 Metal Tech, 2 Fusion Tech + 9 Vacuum Tech or 3 Circuitry Tech

\end{itemize}

\section{Breakdown}

In addition to salvaging Tech from creatures and ruins, characters may also breakdown items for Tech. Breaking down items takes half the time it requires to build it, requires half the skill, and yields half the tech (all rounded down). E.g.: Breaking down the afore-mentioned 9mm Autoloader would require a 6 Mechanics, access to a Mechanics Shop (or a Lil' Shop, since the requirement is under 15), take 15 hours, and give back 1 Metal Tech, 1 Spring Tech, and 0 Plastic/Wood Tech.

\part{The \textit{Fallout} World}

\chapter{North America}

\chapter{South America}

\chapter{Europe}

\chapter{Asia}

\chapter{Africa}

\chapter{Australia}

\chapter{Antarctica}

\part{The Core Region}

\chapter{Geography}

\chapter{Sites}

\chapter{Organizations}

\section{Brotherhood of Steel}

The Brotherhood of Steel has a very mixed reputation across the wasteland. Reverent and protective of technology, the Brotherhood has many scattered bunkers filled with treasures of the Old World and inventions of post-apocalyptic societies. Stubborn, paranoid, and often in turmoil, the Brotherhood has not prospered as it could have were it united under a respected leader. The symbol of the Brotherhood is a winged sword imposed over three interlocked gears.

\section{Caesar's Legion}

Comprised mostly of reconditioned tribals and their offspring, Caesar's Legion is a huge slaving organization that used to operate east of the Grand Canyon. Led by the charismatic and cunning "Caesar", the legionnaires are a well-organized fighting force and absolutely merciless in their slavery. Mimicking the ancient traditions of the Roman Empire, the legionnaires dress in segmented football pad armor and decorated football helmets. Caesar attempted to destroy NCR's presence in the east, and actually succeeded in destroying one of their major fortifications, Fort Aradesh. When Caesar attempted to take Hoover Dam, however, the legion was badly defeated. Since that time, Caesar has moved east of Texas, past the legendary cyclones that rage for most of the months of the year. Despite this, packs of his legionnaires still operate in the southwest, collecting tribute from tribes in the form of goods and slaves.

\section{Church of Jesus Christ of Latter-Day Saints}

Groups of Mormons still survive in the wasteland, mostly in the area that used to be known as the state of Utah. Though truly brutal groups like Caesar's Legion will not hesitate to enslave or kill Mormons, most tribals and other organizations leave the Mormons alone, knowing that they often will voluntarily give medical or other aid to groups who need it. The people tolerate the Mormons' preaching because finding help with relatively benign conditions is rare.

\section{Commonwealths}

Prior to the Great War, the United States had an intermediate level of government between the state and federal powers. In the early 21st century, the nation was divided into thirteen commonwealths. It was believed that such divisions would help create legislation broad enough to affect states with common concerns, but narrow enough to leave dissimilar states alone. In reality, it created even more strife, as commonwealths typically did everything they could to promote their own interests at the expense of other commonwealths. The thirteen commonwealths were:

\begin{itemize}

- \item Columbia---Washington, D.C., Maryland, Virginia
- \item East Central---Ohio, Kentucky, Tennessee
- \item Eastern---West Virginia, Delaware, Pennsylvania, New Jersey, New York
- \item Four States---Utah, Colorado, Arizona, New Mexico
- \item Gulf---Louisiana, Mississippi, Alabama, Florida
- \item Midwest---Wisconsin, Minnesota, Illinois, Indiana, Michigan
- \item New England---Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut

\item North---Montana, Wyoming, North Dakota, South Dakota

\item Northwest---Northern California, Washington, Oregon, Idaho, Alaska

\item Plains---Nebraska, Kansas, Iowa, Missouri, Oklahoma

\item Southeast---Georgia, South Carolina, North Carolina

\item Southwest---Southern California, Nevada, Hawaii

\item Texas---Texas, Arkansas

\end{itemize}

\section{Daughters of Hecate}

The most powerful tribals in the American Southwest are the feared Daughters of Hecate and their slave tribe, the Vipers. Led by an aging, possibly insane woman of fearsome presence, the masked Daughters of Hecate collect tribute from almost all other tribes in the regions they control. Failure to obey the mandates of Hecate often results in crop failure, poor hunting, disease, and barren wombs. For an unknown reason, the Daughters of Hecate reserve a special hatred for Caesar's Legion.

\section{80s}

The 80s are a gang of bandits that operate along the Northern California 80 Freeway, mostly in the region northeast of the lawless, uncontrolled city of Sacramento. They are easily recognized by the ``80" signs they wear strapped across their chests. High-ranking members usually have the Interstate 80 red and blue signs. Lower-ranking members wear green Highway 80 signs and the ordinary grunts make do with what is left over. The 80s are known for their tireless pursuit of enemies and for their occasional use of motorcycles.

\section{Enclave}

One of the few old world organizations to survive the Great War, the Enclave was once the shadow government of the United States. Members of the Enclave were hardliners who both embraced the idea of a nuclear war and knew that the common man could not survive it. They believed that as long as the ``important people" of the United States survived, they could regroup quickly and wipe out communism once and for all. Though not technically part of the Enclave, many powerful corporations benefited from the Enclave's actions and their research facilities were protected during the firestorm of 2077. Chief among these was Poseidon Energy, whose facilities continue to be used by the broken remnants of the Enclave following the Chosen One's assassination of the Enclave's U.S. President and the destruction of their Poseidon oil tanker headquarters off of the California coast. Their symbol is a ring of twelve stars with a bold E at the center.

\section{Followers of the Apocalypse}

Dedicated to reeducating and rebuilding the wasteland, the Followers are a group that originally sprung up in the Boneyards of Adytum (former Los Angeles) around the time of the Vault Dweller. The Followers are generally liked where they go, since they teach people valuable medical and agricultural knowledge. However, some governments dislike the Followers, as they are generally liberal thinkers who occasionally plant seditious thoughts in the heads of oppressed citizens. The Followers are also touchy about their connection with Caesar's Legion, a powerful slaver group of the east. It is from their ranks that the original Caesar came.

\section{Hangdogs}

These tribals have a mixed reputation across the wasteland. Neither known for being particularly brutal or kind, the Hangdogs mostly keep to themselves, living in northeastern Colorado, near Denver---or, as NCR calls it, ``Dog Town''. The Hangdogs run with packs of dogs that have been taken from the hordes that reportedly infest Denver.

\section{Iron Lines}

A group of fairly primitive, nomadic tribals, the Iron Lines patrol and chart the railways of the pre-war world. They collect and often use handcarts to make their way across the wilderness. When they travel, they usually form handcart caravans for mutual safety. The Iron Lines resist the Daughters of Hecate and have remained largely immune to the plagues that haunt other tribes who go against Hecate's wishes. However, the Vipers never pass up an opportunity to butcher any Iron Lines they discover. The Iron Lines decorate their bodies with paintings of parallel lines.

\section{NCR Rangers}

Technically part of the NCR military, the Rangers are practically a force unto themselves. The Rangers are given exceptional leeway and flexibility to deal with both the intrusion of organized crime and the operation of slavers near the borders of NCR territory. NCR Rangers typically have bounties on their head, even in NCR states.

\section{New California Republic}

NCR was founded after the passing of the Vault Dweller. Its solid basis was the fair-dealing community of Shady Sands in central California. NCR gathered together friendly states into a relatively democratic assembly. Once regular commerce was established, caravan houses were formed to transport goods between the member states. Unfortunately for NCR, caravan houses have become organized crime guilds. The corrupting and violent influence of the houses has destabilized NCR in the years following the passing of the Chosen One.

\section{Poseidon Energy}

Easily the most powerful energy company in the world prior to the Great War, Poseidon Energy had its fingers in virtually all forms of renewable and non-renewable power sources. Though most of the public knew that Poseidon was a huge corporation and didn't particularly trust them, very few people were aware that several companies owned by Poseidon were given lucrative defense contracts by the U.S. government--or rather, by Enclave members working as lobbyists for their contracts. Most of Poseidon's most promising projects never reached their final stages. In their paranoid dreams for a coup against the real U.S. government, the Enclave kept their special toys out of military consciousness until it was too late to actually use them. Now, Poseidon does not exist as a "real" force in the world. However, tech scavengers like the Brotherhood of Steel and Enclave still try in vain to decipher Poseidon plans and either confiscate them or turn them into working models, respectively.

\section{Powder Gangs}

When NCR attempted to expand east, they needed railways to carry supplies to distant locations, especially places ripe for colonization. For this task, NCR used criminals from their Black Canyon prison who were approaching the end of their sentences. Unfortunately, when NCR started to have financial problems, payments to the workers started coming up late or short. Eventually, the workers decided to take matters into their own hands, seizing the work stations and all the blasting powder they could find. These packs of criminals became powder gangs, blowing up any and all caravans and railways they came across.

\section{Unity}

The Unity consists of remnants of the Master's supermutant army. Supermutants are hated by most people who live in areas of the Core Region that were threatened by the Master's army. Most members of the Unity are "first generation" supermutants: those created by the Master in his vats. Very few "second generation" supermutants join the ranks of the Unity. Created long after the major attempts at exterminating the supermutants, the creations of the Enclave's foolish Mariposa experiments see little to no reason to band together, especially with the "old fogies".

\section{Van Graffs}

A powerful caravan family operating out of Redding, the van Graffs are one of the primary reasons why NCR has difficulty expanding north. While the Wright family of New Reno trades in drugs and prostitution (the spoils of their successful bid for power in the wake of the Chosen One's passing), the van Graffs trade gold and weapons. Much like the Wrights, the van Graffs are a huge family. The mother, Tialet van Graff, has ten children, all from different fathers. All of her children are intensely loyal to both her and each other. The caravan's symbol is a lion's head.

\section{Vaul-Tec}

Vaul-Tec was the most successful of the companies to make private survival vaults before the Great War. Prior to privatization, the creation of vaults was first a local (commonwealth) responsibility, then a federal responsibility. As with so many things near the end, however, the governments could never agree on how to handle the vault issue. Post-privatization, Vaul-Tec and a few other companies manufactured vaults for private citizens and for communities.

\section{Vipers}

A tribe of males who serve the all-female Daughters of Hecate. The Vipers are feared warriors, mostly for their uncommonly excellent health and large numbers. The Vipers often travel with Daughters of Hecate, protecting them from outsiders or foolish tribes who choose to stand up to Hecate.

\section{Wrights}

The Wright family is the survivor of a bloody turf war that shook the city of New Reno at the time of the Chosen One. After wiping out both the Bishop family and the Mordinos, the Wrights took control of the Mordino drug operation and prostitution all over the town. Though they controlled weapon trade in the northern Core Region for a few years, they were violently knocked out of that trade by a series of brutal attacks from the van Graff family. Neither the van Graffs nor the Wrights are willing to fight each other now, as they know that NCR would almost assuredly try to finish off the victor. The symbol of the Wright family is a bold W in a half-circle sun (as though rising over the horizon).

\chapter{Personalities}

\chapter{Crittters}

\section{Agricola Robot}

Built for pre-war uranium mining waste disposal, the Agricola robots can often be found in abandoned mines and nuclear waste facilities. They are extremely well armored and, more importantly, use vacuum tubes instead of integrated circuits. This makes them almost impervious to the electromagnetic pulse weapons that are so deadly to other robots. Agricola Robots are most often equipped with drills and lasers for cutting rock. Used against human beings, they are quite effective.

\section{Ant, Giant}

Giant ants are nothing to be laughed up. What they lack in individual fortitude, they make up for with relentless attacks and swarm tactics. Their exoskeleton isn't particularly thick, but it can turn aside weak punches and dull knives. Their mandibles can cut through most leather and plastic with ease, even snapping bone on a lucky shot. Giant ants become particularly aggressive when their queen is threatened.

\section{Ant Queen, Giant}

The queen of a giant ant colony is responsible for producing new giant ant workers. Though she is not particularly tough, provoking her will agitate the dozens of subjects that are usually waiting in the wings.

\section{Bat}

Bats are annoying little runts with weak bites. For a well-armored character, they can be wasted with impunity. The unfortunate case is that often bats attack in swarms and killing them noisily can alert other, more powerful foes in the area.

\section{Beetle, Electro-}

Who knows what created these horrible monsters? Radiation and stray power cables seems to be as good an answer as any. Whatever the case, electro-beetles are fast-moving giant insects that generate powerful electrical fields along their antennae. Prized for their natural energy storage ``bio-cells", they are occasionally hunted by the desperate and the brave.

\section{Brahmin}

The beloved brahmin of the wasteland are used for their milk, their hide, and their meat. These two-headed wonders are the staple of non-vegetarian diets in the New California Republic and beyond. Well, except for those darn cannibals.

\section{Centaur}

The mix of a dog and about six other creatures, centaurs are horrible beasts that look like they came out of an Erol Otus sketchbook. They typically attack with their ``mouths" and are extraordinarily strong and hardy.

\section{Centipede, Giant}

Normally content to eat passing vermin, these dog-sized creatures are not above attacking the occasional human or ghoul. Like their smaller brothers, they can move very quickly and deliver deadly poisonous bites with alarming speed.

\section{Cockroach, Giant}

We always knew the day would come when cockroaches would walk out the atomic firestorm better for the experience. That day is here! Giant cockroaches pack a punch with their bite but, as might be expected, the main problem with them is that they are insanely difficult to kill. Fire, bullets, lasers---take your pick. Most things bounce right off of them. Only persistence will eventually do these things in.

\section{Coyote}

Our friends from the desert are tired of picking off stray cats. In the post-apocalyptic world, they figure they wouldn't mind taking a bite out of the occasional brahmin, ghoul, or human.

\section{Deathclaw}

I JUST CANNOT GET ENOUGH OF THESE GUYS. I dropped the hair and the intelligence down just enough to make them the nigh-unstoppable killing machines people remember from Adytum in the original \textit{Fallout} game.

\section{Desert Stalker}

One of the lovely predators unique to the Sonoran desert and its outlying areas, the desert stalker attacks by burrowing up from the ground underneath the victim and biting him with razor sharp mandibles. Desert stalkers have an uncanny ability to go for the weakest person in any group. They will usually attack that person in spite of repeated attacks from others.

\section{Dog}

Though beloved as Dogmeat and even Pariah Dog, the player may very well be pushed to hate all dogs given enough encounters. Attacking in packs and regularly taking their opponents down with leg attacks, dogs can be more than a minor nuisance.

\section{Dwarf}

Kept for nostalgia, the dwarves of \textit{Fallout} are just little humans that got messed up by too much radiation in the gene pool. They are pretty much similar to humans, BUT SMALLER.

\section{Floater}

Maybe a cross between a plant and a snake, no one was ever quite sure what the floater's freaky deal was. As in \textit{Fallout} and \textit{Fallout 2}, they don't move very fast, but once they get to you, they'll slash you to bits with their gaping maws.

\section{Floating Eye Bot}

One of the most 50's-esque of the classic \textit{Fallout} robots, the floating eye bots certainly get around the wasteland. They come equipped with lasers, shock rods, and tranquilizer guns.

\section{Gecko}

They come in regular, golden, and fire-breathing varieties, and maybe an extra fun type just for kicks. Giant mutant geckos are a good source of easy hides and the occasional tough combat.

\section{Ghoul}

The ghouls of the modern \textit{Fallout} world are starting to get tired of being pushed around by smooth-skins and have a variety of plans for how to take revenge. Ghouls fight in a variety of ways, but one thing never changes: they are slow as shit.

\section{Gila Monster, Giant}

The apocalyptic American southwest would not be complete without giant gila monsters. Normally quite docile, the giant gila monsters may occasionally become violent when they feel their territory is threatened. The main problem with giant gila monsters is not their powerful bite (which is bad), but their radioactive venom (which is worse).

\section{Leech, Giant}

These giant, foul creatures can be found in watery places throughout the \textit{Fallout} world. Once they attach themselves, they very rapidly drain blood from their new friend.

\section{Mantis}

Giant preying mantises are not particularly dangerous, but they often attack in packs. They have decent natural armor and their bites, though not individually powerful, can quickly spell death for the unarmored traveler.

\section{Mantrap}

Mantraps are carnivorous plants created through genetic engineering prior to the war. Of course, after the war, seeds got out of protected facilities and, well, you know how it goes. Mantraps are not mobile creatures, but they will draw creatures towards them using a strange type of pollen. Once they have trapped a creature, they will use another type of pollen to repel creatures. After they have drained all life from a target, they will drop it.

\section{Molerat}

These weird hybrids of moles and rats are not incredibly tough, but they have very sharp senses, making them almost impossible to sneak past. They bite with their ratlike teeth, which are not very powerful, but often carry nasty diseases.

\section{Mr. Handy}

He's soooooo handy! Mr. Handy robots are normally used for maintenance in large mechanical facilities like the Box or Tibbets Prison. They are bigger than most humans, and they have a number of strong arms that they can use for a variety of tasks, including the use of weapons in combat. Mr. Handy models are very vulnerable to electromagnetic pulses, but there are a few special Mr. Handy NBS (Nuclear Blast Site) models that are slower, tougher, and equipped with vacuum tubes to prevent EMP damage.

\section{Radscorpion}

Appearing in large and hellaciously huge versions, radscorpions are bad news in both sizes. The smaller radscorpions have a more dangerous form of venom in their tail, but the larger radscorpions have much more powerful pinchers. Both versions have tough exoskeletons.

\section{Rat, Giant}

Typically found in abandoned buildings and semi-active sewers, the classic giant rat can often sneak up on an unsuspecting traveler. Unlike ordinary rats, these suckers are hungry for flesh. They attack with their teeth, and like molerats, often carry disease.

\section{Robobrain}

Robobrain are robots with human brains taken from ``volunteers" pre-war. Most often these volunteers were criminally insane, so the robobrain aren't the most stable group of `bots ever assembled. They can attack with their hands, but are usually better with weapons.

\section{Scurry Bot}

Scurry bots are cat-sized robots that zip around taking care of little things that Mr. Handy's can't deal with. They aren't very strong, but they can survive a light beating. When required to fight, they attack with miniature shock rods

\section{Security Robot}

These are not the \textit{Mechwarrior}-esque security robots from \textit{Fallout 2}. They are floating robots somewhat similar to floating eye bots, but far more dangerous. Security robots do not have the extraordinary perception of floating eye bots, but their armor and weapons are much more formidable. Typically using extremely powerful shock rods, they will launch a limited supply of explosive rockets at stubborn opponents.

\section{Snail, Giant}

Giant snails are no laughing matter to the agrarian cultures of the post-apocalyptic wasteland. Shooting acid and destroying crops wherever they go, they are difficult to get rid of even for patient warriors. Their heads are relatively easy to damage, but their bodies are covered by a nigh-impenetrable shell.

\section{Spore Plant}

Spore plants aren't as dangerous as mantraps or thorn-slingers, but if they're unavoidable, they can be problematic for melee and unarmed characters. They shoot out thin thorn slivers that, by themselves, are not particularly harmful. However, spores that miss their target have a small chance of quickly growing into a new spore plant in less than a day.

\section{Super Mutant}

First created by the Master and later reproduced by the Enclave, there are a few of these ugly bastards still wandering the wasteland. Super mutants possess tremendous strength and are capable of withstanding everything from baseball bats to pistol fire. They are tough enough to almost make up for their tendency towards colossal stupidity. Though some super mutants make it out of the vats with their minds intact, they are the exception rather than the rule.

\section{Thorn Slinger}

Much more dangerous than spore plants, thorn slingers are able to shoot their highly poisonous, armor-piercing darts with accuracy to great distances. Thorn slingers are large, immobile plants, so they are easy to hit---as long as they don't kill you before you get a chance. Thorn slingers are another wonderful pre-war invention of the Nursery gone horribly wrong.

\section{Turret}

Turrets are normally dormant and concealed inside their cylindrical bodies, but when alerted to hostiles, they accurately deal out death at a frightening rate. Turrets can fire standard bullets, rockets, or lasers. Each version is very bad for anyone who comes across it.

`\section{Two-Headed Snake}`

What's worse than a giant rattlesnake? A giant two-headed rattlesnake, of course! Giant two-headed rattlesnakes are annoying for travelers because they often sit in the darkness and blend into the background. Their attacks are extremely quick, their fangs can penetrate light armor, and their venom can kill quickly.

`\section{Wasp, Giant}`

Giant wasps are nasty, hostile creatures that travel in groups of three and go out of their way to find things to kill. They hate seeing humans and animals in their territory and will sting such targets mercilessly until they die from their powerful venom.

`\section{Weedling}`

Weedlings are yet another horrible Nursery creation. They aren't very large, and they can't shoot thorns or seduce people with pollen, but they are mobile. Weedlings are like little plant people who are angry at their state. Weedlings are naturally curious, and will walk up to new creatures without attacking. However, they occasionally will perceive some unintended threat from a creature and an entire pack of them will go into a frenzy. It is up to the individual traveler to decide whether outright aggression or patient caution is the better route for dealing with these weirdos.

`\section{Wolf}`

Wolves almost always travel in packs. Though they are less numerous than the horrible mongrels in Dogtown, wolves are much more individually dangerous and persistent. Wolves have sharp teeth and will frequently knock a target over, then attack the head.

`\backmatter`

`\appendix`

`\listoftables`

`\end{document}`